

## **SOIL CLOSURE REPORT**

**JERVIS B. WEBB COMPANY OF CALIFORNIA  
SOUTH GATE, CALIFORNIA**

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## **Certification**

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All field work and engineering and geologic evaluations in this report were performed under the direct supervision of registered professionals with at least five years of hydrogeologic experience. This certification is made in compliance with the State Water Resources Control Board Resolution No. 92-49 (Water Code Section 13304) and the California Business and Professions Code Sections 6735, 7835, and 7835.1

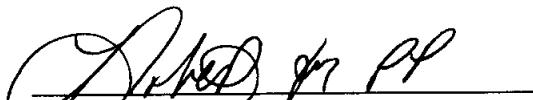
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## **EXECUTIVE SUMMARY**

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This report summarizes the results of IT Corporation's sampling of five soil confirmation borings at the Jervis B. Webb Company of California (Webb of California) site in South Gate, CA. The confirmation borings were required by the Los Angeles Regional Water Quality Control Board (RWQCB) in order to fulfill the requirements for soil closure, per a letter dated August 14, 2001. Five soil confirmation borings (CB-1 to CB-5) were sampled at the site on September 13-14, 2001. The Webb of California site consists of the 1.4 acre Firestone property (5030 Firestone Boulevard) and the 2.8 acre Rayo property (9301 Rayo Avenue), which is now owned by Reliable Steel. Based on the extensive investigation of the site, the removal of contaminant source areas, the effective remediation of VOCs by the SVE system, the low levels of residual VOCs remaining, the consistent background levels of naturally occurring arsenic, and the lithology and current use of the site, we are requesting soil closure for the site.

No hexavalent chromium was detected in the 10 samples submitted for analysis from borings CB-1 and CB-2. The Title 22 metals analyses indicated that no elevated metal levels were present (compared to EPA's industrial PRG level) and all measured concentrations were within normal background levels. Arsenic levels ranged from 2.2 to 7.9 mg/kg in boring CB-2 and from 2.2 to 6.1 mg/kg in boring CB-1. These arsenic levels are within normal background levels (naturally occurring) for Southern California soils according to a background trace metals report published by the California Department of Toxic Substances Control (1992) and are consistent with those levels found previously at the Rayo portion of the site. The arsenic levels are also consistent with background arsenic levels observed locally, including the nearby Cooper Drum Company site (9316 South Atlantic Avenue, South Gate (USEPA 1999)) and the Proposed Park Avenue Primary Center (SE corner of Florence Avenue and Wilcox Avenue in Cudahy (IT 2001)).

Analysis for VOCs determined that 24 of the 32 vadose zone samples (75%) did not exceed the respective screening level for TCE. The eight samples which did exceed the TCE screening level, occurred in soils which were predominantly clay in nature and which tend to retain VOCs. The highest TCE concentrations remaining in the soil were found at 30 feet depth in boring CB-4 (630 ug/kg) and at 25 feet in CB-3 (290 ug/kg). SPLP leaching tests on these two samples showed only trace levels of leachable TCE.

We believe that soil closure of the Webb of California site is warranted at this time for the following reasons:

- The Webb of California site is zoned heavy industrial and is surrounded by similar heavy industrial businesses. Webb is actively marketing the property for industrial use.
- A comprehensive and systematic investigation of the Webb of California site has been completed, including nine CPT borings, 37 soil gas probe locations, 19 soil borings, 9 PIPP groundwater samples, and 5 groundwater monitoring wells.
- The source of the TCE contamination has been removed. The clarifier was removed in June 1999 and approximately 47 cubic yards of contaminated soil surrounding the clarifier was excavated and disposed off-site.
- Removal of a concrete containment structure (6,500 gallon) and an open-bottom sump (250 gallon) at the Rayo property was completed in November 1996. A small amount of lead contaminated soil was excavated from beneath the open bottom sump and disposed off-site. Confirmation testing of the soils showed no elevated levels of metals, including arsenic and total chromium. The LACDPW issued a no further action (NFA) letter for the Rayo property on December 17, 1996
- Operation of a soil vapor extraction system for the past 18 months has been successful in removing more than 155 pounds of VOCs (primarily TCE) from the soil (as of May 2001). The SVE system (best available technology) has been very effective in removing nearly all of the VOC contamination from the soil. The extracted vapor concentrations have reached a low asymptotic level (less than 20 ppmV). It is estimated that more than 88 percent of the VOCs in the soil prior to remediation have been removed by the SVE system.
- The confirmation borings verify significant decreases in both TCE and PCE levels in the soils as compared to the pre-remediation borings sampled by EKI in October 1997. The most significant reduction was observed in confirmation boring CB-1 (as compared to corresponding EKI boring B-4, which had the highest pre-remediation levels by far), with TCE declining from 270,000 ug/kg to 35 ug/kg at 20 feet depth and PCE decreasing from 140,000 ug/kg to 35 ug/kg at the same depth. Soil samples collected from all depths and from all five confirmation borings showed significant reduction in VOC concentrations after remediation was completed.

- The results of the SPLP leaching tests on two clayey samples which exhibited the highest TCE levels, showed a leachable TCE level of only 10 ug/l and 2.7 ug/l. The concentrations of TCE in the two samples prior to the leachate test were 630 ug/kg and 290 ug/kg, respectively. SPLP tests also show that PCE leachate is produced at levels of 1.4 ug/l and < 1 ug/l. Thus, the SPLP tests confirm that any TCE and PCE that could leach through the clay would be very low in concentration and will not impact groundwater quality. The average TCE leachate concentration of the two SPLP samples (6 ug/l) is of a similar magnitude as the MCL level (5 ppb). The average PCE leachate concentration (1 ug/l) is less than the MCL.
- The probability of rainwater leaching to depths of 30-40 feet at the Webb of California site is considered highly remote, since the entire site is covered with buildings or paved with asphalt and concrete and the rainwater would not easily infiltrate the underlying silty and clayey soils.

In conclusion, no further action regarding soil cleanup is warranted at this time and we request the RWQCB to issue a closure letter for the soils at the site.

# **1.0 Introduction**

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## **1.1 Purpose**

This report summarizes the results of IT Corporation's sampling of five soil confirmation borings on September 13-14, 2001 at the Jervis B. Webb Company of California (Webb of California) site in South Gate, CA. The confirmation borings were required by the Los Angeles Regional Water Quality Control Board as the last step following operation of the soil vapor extraction system in confirming the site is suitable for closure. This work was completed in compliance with the Work Plan for Soil Closure dated June 25, 2001 and Addendum to the Work Plan dated July 18, 2001. The RWQCB approved of the Work Plans by a letter dated August 14, 2001.

## **1.2 Site Description**

The Webb of California properties are located at 5030 Firestone Boulevard and 9301 Rayo Avenue in the City of South Gate, California. A site location map is included as Figure 1. The Webb of California site is bounded on the north by Firestone Boulevard and on the south by Rayo Avenue. Piazza Trucking (formerly Laidlaw) lies to the immediate east of the Webb site. To the west is a 50-foot wide Union Pacific Railroad easement.

The Webb-Firestone property occupies about 1.4 acres. The Webb-Rayo property, which was sold to Reliable Steel in 1997, occupies about 2.8 acres. The Webb-Firestone property includes a 20,000 square foot, steel-framed building with corrugated steel siding. The building is surrounded by asphalt and concrete paving except for a planter on the north side of the building. A five-foot wide rail spur enters the subject property from the northwest and extends along the west side to a 10,000 square foot, steel-framed open bay on the Reliable Steel property to the south. The Reliable Steel property also is improved with a 37,000 square foot corrugated steel building. Along the entire western portion of the property is a 35- foot wide Los Angeles County Flood Control easement that contains a large underground storm drain. Another storm drain runs along the north side of the property along Firestone Boulevard. A sanitary sewer pipeline extends across the eastern side of the Webb-Firestone property to another sewer line in Rayo Avenue (south of the Reliable Steel property).

## **1.3 Site History**

Webb of California manufactured conveyor systems at the Rayo property (now the Reliable Steel property) from the middle 1950s to early 1996. The Firestone property was purchased by Webb of California in 1975 from Spear Industries. Blake Rivet Company (Blake), an aircraft rivet

manufacturer, which had been leasing the property prior to Webb's purchase, continued to lease the property until approximately 1981. Blake used an above ground anodizer as part of its rivet manufacturing operation. Wastewater from the anodizer was collected in floor trenches where it was directed to a three-stage clarifier made of concrete. The clarifier was located just to the south of the southern wall of the Firestone property building (see Figure 2) until it was removed in June 1999. The clarifier reportedly discharged into the local sewer system.

After Blake's departure, Webb of California used the Firestone property primarily for storage of metal stock that was used at the adjacent Webb Rayo conveyor facility until it was purchased by Reliable Steel in 1997.

#### **1.4 *Surrounding Land Use***

The area surrounding the site includes a mixture of commercial and industrial uses. Appendix D (Figure 2) shows the spatial relationship of the site to other properties in the neighborhood. Adjacent facilities within a 1/2-mile radius include the following:

- North – Across Firestone Boulevard there are 14 different industrial, commercial, and manufacturing facilities.
- East – Adjacent to the subject site is Piazza Trucking (#15 and #16 on Figure 1A). Directly across Rayo Avenue is Pacer International (#17) at 9300 Rayo Avenue. Further to the east lies the Los Angeles River and the Interstate 710 Freeway.
- South – Directly south of the subject site are the Union Pacific Railroad tracks. Beyond the tracks, is Purex Rubbish Disposal Company (#19, a solid waste landfill site) at 9400 S. Rayo Avenue. Across the tracks and to the east of Purex is the California Alabama Pipe Company (#20). Beyond the pipe company is the Los Angeles River.
- West – Directly west of the subject site is Union Pacific Railroad tracks. Beyond the tracks, is McLeod Metals (#21) at 8980 Kendall Avenue and 9309 Rayo Avenue. West of McLeod Metals is Cooper Drum Company (#22) at 9316 Atlantic Avenue. North of McLeod Metals is United Ready Mix Concrete (#23) at 4988 Firestone Boulevard. Further west along the south side of Firestone Boulevard to Atlantic Avenue, there are several small establishments including a paint store, motel and Jack-in-the-Box restaurant.

#### **1.5 *Previous Investigations***

Several prior investigations of the Webb of California site and vicinity were conducted between the summer of 1995 and spring of 2001. There were 18 reports prepared to document these investigations. Erler and Kalinowski, Inc. (EKI) conducted the majority of the investigations

during 1996 through 2000 and produced several quarterly progress reports (EKI: 1996, 1998a, 1998b, 1998c, 1998d, 1999a, 1999b, 1999c, 1999d, 1999e, 2000a, 2000b, 2000c, 2000d, 2000e, 2001a, and 2001b). These reports included: one Phase I ESA, two Phase II ESAs, a well installation work plan and proposal, a quarterly monitoring work plan, a soil remediation work plan, eight quarterly groundwater monitoring reports, and a groundwater remediation work plan. The Dragun Corporation and IT Corporation prepared a joint report in May 2001 to further evaluate site conditions.

### ***1.6 Site Topography***

The Webb of California property is situated in an area of generally low relief with elevations ranging from about 107 feet above mean sea level at the northwest property corner to about 104 feet above mean sea level at the southeast property corner. The land surface slopes very gently to the south with a gradient of approximately 12 feet per mile. The site is located approximately  $\frac{1}{4}$ -mile west of the channeled Los Angeles River that flows due south. The Rio Hondo River flows into the Los Angeles River approximately 1.2 miles south.

### ***1.7 Climatic Conditions***

The climate of the Webb of California site is typical of southern California, with a rainy season from November through March followed by hot and dry conditions during the summer and fall months. The air temperatures are generally mild ranging from 35 to 95 degrees Fahrenheit ( $^{\circ}\text{F}$ ) with occasional 100 degree ( $^{\circ}\text{F}$ ) temperatures during August and September. The average annual precipitation in the Los Angeles Basin is approximately 12 to 20 inches.

### ***1.8 Geology and Hydrogeology***

The subject site lies at the eastern edge of the Central Groundwater Pressure Basin of the Coastal Plain Province of Los Angeles County, California (California Department of Water Resources (DWR), 1990). The Los Angeles Coastal Plain groundwater basin encompasses the Central, West Coast and Hollywood Groundwater Basins (California Regional Water Quality Control Board [RWQCB], 1994). Locally, the site lies within the Downey Plain. Water-bearing strata within the Downey Plain include Recent Alluvium, the Lakewood Formation, and the San Pedro Formation. The Recent Alluvium contains the Semi-perched aquifer, Bellflower aquiclude (an impermeable clay layer) and Gaspur aquifer. The Exposition and Gage aquifers are a part of the Lakewood Formation, whereas the Hollydale, Jefferson, Lynnwood, Silverado and Sunnyside aquifers are a part of the San Pedro Formation.

The Water Replenishment District of Southern California (WRDOSC, 2000) has subdivided the groundwater aquifers within the Central Basin into six distinct groundwater zones based upon their depth and water quality characteristics. Several regional nested wells are sampled twice annually and provide the basis for the six groundwater zones. The WRDOSC wells nearest the subject site, are South Gate Well #1 located about one mile south of the Webb site and Downey Well #1 located about 3 miles to the southeast.

The six zones are numbered in decreasing order with number six being the shallowest zone. Average total dissolved solids (TDS) concentrations (in milligrams per liter) and TCE and PCE concentrations (in micrograms per liter) have been reported by WRDOSC for each groundwater zone. The water quality data from the six zones (based on July 1999 data) are tabulated below:

<u>Zone</u>	<u>Aquifer Name</u>	<u>Screened Interval (feet)</u>	<u>TDS (mg/l)</u>	<u>TCE (ug/l)</u>	<u>PCE (ug/l)</u>
6	Gaspur	90 to 110	760	2.5	ND
5	Exposition	250 to 270	430	ND	0.5
4	Hollydale/Jefferson	370 to 390	470	0.8	7.9
3	Silverado	580 to 600	430	ND	0.6
2	Silverado	940 to 960	390	ND	ND
1	Sunnyside	1,170 to 1,190	300	ND	ND

The total dissolved solids (TDS) concentrations decrease with depth indicating the inorganic water quality generally improves with depth. VOCs (PCE and TCE) have been detected in aquifers as deep as 600 feet below grade. Water in all 6 zones has been classified as calcium bicarbonate type water. The Los Angeles and Rio Hondo Rivers are sources of groundwater recharge for the shallow aquifers of the Central Basin.

The regional flow direction in the deeper aquifers beneath the site (Hollydale, Jefferson, Silverado and Sunnyside) is generally to the west, while the flow in the shallow aquifers (Gaspur and Exposition) is towards the south (WRDOSC, 2000). Water levels measured by EKI (1998b, 1999a and 2000e) beneath the site occur at approximately 59-60 feet above mean sea level (MSL). These measurements are consistent with the WRDOSC monitoring wells penetrating the Gaspur and Exposition aquifers, which have water levels ranging from 40 to 51 feet above MSL.

According to a DWR geologic cross section beneath the Downey Plain, the Gaspur aquifer is about 20 to 40 feet thick beneath the South Gate area and thins to the east as it approaches the Los Angeles River (DWR 1990). A 100 to 150-foot thick, impermeable layer, which corresponds with the Bellflower aquiclude, underlies the Gaspur aquifer. The WRDOSC (2000)

indicates the Gaspur aquifer is not hydraulically connected to the deeper, drinking water producing aquifers (i.e., the Hollydale, Jefferson, Lynnwood, Silverado and Sunnyside aquifers).

### ***Local Hydrogeologic Conditions***

Appendix D, Figures 3 and 4 show the locations of 19 soil borings, five groundwater-monitoring wells and nine cone penetrometer test (CPT) locations investigated by EKI (1998a, 1999a and 2000e) to interpret the subsurface lithologic and hydrostratigraphic conditions beneath the subject site. Figure 3 also shows the locations of cross-section A-A' prepared by EKI (1998a and 2000e) and cross-section B-B' prepared by IT for this report.

Both geologic cross sections (Appendix D, Figures 5 and 6) indicate the subject site is underlain by unsaturated, unconsolidated and interbedded layers of silty sand (SM), well graded sand (SW), and silt (ML) to approximately 25 feet below ground surface (bgs). Both the soil boring logs and CPT data indicate that at approximately 25 feet bgs there is a continuous 2 to 5-foot thick layer of clay (CL). Beneath the clay layer, there are unsaturated, unconsolidated and interbedded layers of silty sand (SM), silt (ML) and well graded sand down to the water table at 40 feet bgs. The water table fluctuates by about 3 feet during seasonal high and low stands, according to EKI well measurements (Table 1). Below the water table are saturated interbedded layers of silt (ML), silty sand (SM), well graded sand (SW) and poorly graded sand (SP) to the total depth (73 feet bgs) explored by EKI.

### ***Groundwater Flow Conditions***

Appendix D, Table 1 summarizes the water table elevation data for the site (EKI, 2000e). Appendix D, Figure 7 is the groundwater contour map for the site based on measurements of November 5, 1998. The November 5, 1998 contour map is included in this report because it coincides with the most areally comprehensive groundwater sampling for the Site. This occurred during October/November 1998 when EKI collected groundwater samples from the push-in-place piezometers (PIPP) in the CPT borings during October 1998 and from the monitoring wells during November 1998. The groundwater flow direction, based on the November 5, 1998 data, is generally from north to south.

The November 5, 1998 groundwater contour map is generally representative of the groundwater flow conditions documented during the 29 other monitoring events conducted between February 1998 and June 2001. The groundwater contour maps generated for each monitoring date indicate that although the groundwater flow direction has varied to a limited extent, groundwater flow at the Site during the period of investigation has consistently been from north to south. The north

to south groundwater flow direction is consistent with more regional investigations. This indicates that the northern property boundary is consistently the upgradient property boundary and the property boundaries to the west and east are sometimes upgradient. From the contaminant transport perspective, this indicates that chemicals in the groundwater would consistently move in the general direction from north to south.

The groundwater contour maps also show that the hydraulic gradient in the northern end of the Site near Firestone Boulevard is considerably higher than the hydraulic gradient in the southern portion of the Site. Two possible explanations for the change in hydraulic gradient are: (1) the transmissivity of the aquifer increases from north to south; and/or (2) there is a groundwater recharge source just north of the property boundary. At this time, there are insufficient data to determine which condition is responsible for the change in hydraulic gradient.

In summary, the water table at the Site occurs at approximately 40 feet bgs. The groundwater flow direction is predominantly north to south. Therefore, the upgradient property boundary is predominantly the northern property boundary, along Firestone Boulevard.

### **1.9 Characterization of the Site and Removal Actions**

A comprehensive and systematic investigation of the site has been completed, including nine CPT borings, 37 soil gas probe locations, 19 soil borings, nine PIPP groundwater samples, and five groundwater monitoring wells. Quarterly groundwater sampling and reporting has been completed since 1998. The industrial waste clarifier was removed from the Firestone property in June 1999 by Cornerstone Environmental Contractors, Inc. (EKI July 30, 1999). Cornerstone excavated an area measuring approximately 15 feet by 11 feet by 8 feet deep surrounding the clarifier. A total of 47 cubic yards of clean backfill material (sand) was backfilled into the excavation after approval of the sewer pipe capping by an Inspector from the City of South Gate.

On the Rayo property, EKI and Cornerstone Environmental Contractors removed a concrete containment structure (6,500 gallon) and an open-bottom sump (250 gallon) in November 1996. Soil samples were collected two feet below the floor of each tank (referred to as Tank 1 and Tank 2, respectively) immediately following their removal. Samples collected beneath Tank 1 (T-1 and T-2) showed no detectable levels of total recoverable petroleum hydrocarbons by EPA Method 418.1, no detectable TPH as gasoline or diesel, no detectable VOCs by EPA 8260, and no elevated levels of Title 22 metals above their respective Preliminary Remediation Goals (PRG) levels. A site plan showing the location of the two tanks is shown in Appendix D, Figure 2.

The initial soil sample collected beneath Tank 2 (P-1-2) showed elevated levels of total lead (1,600 mg/kg) which exceeded the PRG for lead in industrial soil (1,000 mg/kg) set by U.S. EPA. This sample was collected beneath a dried layer of paint waste at the bottom of the sump. The LACDPW inspector required additional excavation beneath Tank 2 to a depth of 10 feet below ground surface (bgs). Five soil samples were collected from the bottom and four sidewalls of the excavation (samples P-2 thru P-6). Analysis of these five samples showed that no elevated lead levels remained in the native soils. Soil samples collected at 2 feet and 10 feet below Tank 2 showed no detectable levels of VOCs (EPA 8260) and TPH (EPA 8015). Figures 3 and 4 (Appendix D) show the sampling locations beneath the two tanks. Overall, a total of approximately 35 cubic yards of soil was excavated from beneath Tank 2. The soil was transported to a permitted off-site waste disposal facility. A summary of the sampling results from the removal of Tanks 1 and 2 is provided in Appendix D, Tables 4 and 5.

Low levels of arsenic (ranging from 1.6 to 3.1 mg/kg) and total chromium (ranging from 7.4 to 16 mg/kg) were detected in the soil during removal actions described above. The levels of both metals are considered to be naturally-occurring background levels. The arsenic levels are within normal background levels for Southern California soils (range of 7.9 to 10 mg/kg) according to a trace metals in soils report published by the California Department of Toxic Substances Control (1992). The arsenic levels are also consistent with the background arsenic levels observed at other local areas, including the nearby Cooper Drum Company site (9316 South Atlantic Avenue, South Gate), which reported arsenic at a range of 1.5 to 10.4 mg/kg (USEPA 1999), and the Proposed Park Avenue Primary Center (SE corner of Florence Avenue and Wilcox Avenue in Cudahy), which reported arsenic at a range from 0.21 to 3.11 mg/kg (IT 2001).

Following review of the Closure Report submitted by EKI (1996), the LACDPW issued a no further action (NFA) letter for the Rayo property on December 17, 1996.

### ***1.10 Operation of a Soil Vapor Extraction System***

Four soil vapor extraction (SVE) wells and four vapor monitoring probes were installed at the site in June 1999. Three of the monitoring probes were later converted to SVE wells by connecting to the SVE vacuum manifold. A total of four shallow SVE wells are screened from 19 to 25 feet, while three deep SVE wells are screened from 30 to 40 feet. The locations of the SVE wells are shown in Appendix E, Figure 7, which is a reproduction of pertinent SVE data from EKI's most recent Quarterly Progress Report for the site (EKI, July 2001).

The SVE system operates at a flow rate of approximately 200 scfm and extracted vapors are treated by two 1,000 pound granular activated carbon vessels in series under a permit issued by the South Coast Air Quality Management District. The SVE system started operation on March 16, 2000. The system has operated nearly continuously for the past 15 months, except for a few brief down periods. A subcontractor to EKI has routinely monitored the system on a weekly basis to collect data regarding total flow rate, vacuum, temperature, and influent vapor concentrations monitored with a photo-ionization detector (PID).

Influent PID vapor readings have ranged from a high of over 2,000 ppmV in March 2000 to 8.5 ppmV in March 2001. Grab samples (Tedlar bag) of the influent have also been periodically collected and analyzed for VOCs. The TCE concentration in the influent have decreased from 860 ppmV to 30 ppmV over the period of SVE operation. TCE concentrations in the individual extraction wells have also shown dramatic decreases, in particular well SVE-1 which has declined from 10,000 ppmV to 350 ppmV. The system influent and the seven SVE wells have all reached an asymptotic level with respect to TCE concentrations. Figures illustrating the TCE and PID concentrations over time in the influent and individual wells are provided in Appendix E.

EKI estimated that a total of 155 pounds of VOCs had been removed from the soil as of May 2001 (EKI 2001). This removal total of 155 pounds can be compared with an estimate of contaminant mass that was present in the soil prior to the start of remediation. Based on the EKI's soil boring data, IT has calculated that approximately 177 pounds of VOCs were originally present in the soil. Comparison of the pre-remediation mass with the mass removed indicates that approximately 88 percent of the mass has been removed from the soil as of May 2001. The SVE system has continued to operate since that time.

## **2.0 Confirmation Boring Activities**

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Five (5) confirmation soil borings were drilled and sampled at the Jervis B. Webb of California site on September 13-14, 2001. The locations of the confirmation borings were drilled within a few feet of prior borings (pre-remediation) which exhibited elevated levels of TCE. The locations of the confirmation soil borings are shown in Figure 2. With the approval of the RWQCB, the confirmation borings were located as follows:

<b>Confirmation Boring No.</b>	<b>Location</b>	<b>Maximum TCE Concentration in Pre-Remediation Boring</b>
CB-1	Approximately 15 ft west of clarifier near boring B-4	270 mg/kg at 20.5 ft depth
CB-2	Approximately 15 ft south of clarifier near boring B-18	16 mg/kg at 21 ft depth
CB-3	Approximately 20 ft northeast of clarifier near boring B-7	0.019 mg/kg at 6 ft depth
CB-4	Approximately 50 ft north of clarifier near boring B15	0.520 mg/kg at 31 ft depth
CB-5	Approximately 50 ft south of clarifier near boring B-16	Non detected at all depths

The first two borings sampled (CB-2 and CB-5) were advanced using a Cone Penetrometer Testing (CPT) rig, while the remaining borings (CB-1, CB-3, and CB-4 all located inside the building) were sampled using a direct push Geoprobe-type rig. All of the borings were advanced to a depth of 35-40 feet below ground surface (bgs). A core-type sampler equipped with aluminum sleeves was used to collect soil samples at depths of 5, 10, 15, 20, 25, 30, 35, and 40 feet bgs. Samples for laboratory VOC analyses were immediately extracted from the sleeve using a 5-gram Encore™ sampler. The VOC analyses were performed by an onsite mobile laboratory operated by Centrum Analytical Laboratories, Inc using EPA Method 8260B.

Samples obtained starting at 20 feet depth in boring CB-1 and at 16 feet in boring CB-2 were also analyzed for Title 22 metals (EPA Method 6010) and hexavalent chromium (EPA Method

9196A) at Centrum's stationary lab in Redlands, CA. All soil samples obtained for laboratory analyses were labeled and placed on ice for transport to the laboratory. Proper chain of custody procedures were followed.

The remaining soil in the sleeves was screened in the field using a calibrated photo-ionization detector (PID) and then logged by the field geologist. Soil descriptions, soil type percentages, and PID readings were recorded onto the boring logs, a copy of which are included in Appendix A. The boreholes were backfilled with cement-bentonite grout following completion of the sampling.

CPT logs were recorded immediately adjacent to borings CB-2 and CB-5 and were designated as CPT-2 and CPT-5. Copies of the CPT logs are provided in Appendix A. The CPT logs correlated well with the visual logs recorded by the field geologist.

No soil cuttings (for disposal) were generated from the direct push sampling of the borings. One small container of decontamination water was generated and the driller took responsibility for its proper disposal.

## ***2.1 VOC Leachability Testing***

In order to evaluate the leachability of VOCs from the soil, a Synthetic Precipitation Leaching Procedure (SPLP) was performed on the soil samples collected from CB-3 at 25 feet and CB-4 at 30 feet, the only two samples with TCE above 100 ug/kg. This test was performed according to EPA Method 1312. The leachate from the test was then tested for VOCs by EPA Method 8260B.

## ***2.2 Geotechnical Laboratory Analyses***

To aid in the determination of site specific attenuation factors, soil samples collected from the clay units in borings CB-3 (at 25 feet) and CB-4 (at 30 feet) were analyzed for particle size analysis by ASTM Method D422-63. The analyses were performed by IT/EMCON Laboratory in Tuxedo, NY. The particle size data report is provided in Appendix C.

## **3.0 Soil Analytical Results**

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Soil samples collected at 5, 10, 15, 20, 25, 30, 35, and 40 feet (bgs) were analyzed for VOCs using EPA Method 8260B. Soil samples obtained at depths of 15, 20, 25, 30 , 35, and 40 feet in CB-2 and at depths of 20, 25, 30, and 35 feet from boring CB-1 were also analyzed for Title 22 Metals (EPA Method 6010) and for hexavalent chromium (EPA Method 9196A). Proper chain of custody procedures were followed in the field and the chain of custody forms are included as part of Appendix B.

### **3.1 Hexavalent Chromium and Title 22 Metals**

A summary of the hexavalent chromium and Title 22 metals results are tabulated in Table 1. No hexavalent chromium was detected in the 10 samples submitted for analysis. The Title 22 metals analyses indicated that no elevated metal levels were present (compared to EPA's industrial PRG level) and all measured concentrations were within normal background levels. Arsenic levels in the soil ranged from 2.2 to 7.9 mg/kg in boring CB-2 and from 2.2 to 6.1 mg/kg in CB-1. The industrial PRG level for arsenic is 2.7 mg/kg. Overall, the arsenic levels were within normal background levels for Southern California soils in general and for the local area in particular. The arsenic levels are within normal background levels for Southern California soils (range of 7.9 to 10 mg/kg) according to a background trace metals report published by the California Department of Toxic Substances Control (1992) and are consistent with the background levels found previously at the Rayo portion of the site. The arsenic levels are also consistent with the background arsenic levels observed at other local areas, including the nearby Cooper Drum Company site (9316 South Atlantic Avenue, South Gate), which reported arsenic at a range of 1.5 to 10.4 mg/kg (USEPA 1999), and the Proposed Park Avenue Primary Center (SE corner of Florence Avenue and Wilcox Avenue in Cudahy), which reported arsenic at a range from 0.21 to 3.11 mg/kg (IT 2001).

### **3.2 Volatile Organic Constituents (VOCs)**

A summary of the VOC results are tabulated in Table 2. The only significant VOCs detected in the five confirmation borings were trichloroethylene (TCE) and perchloroethylene (PCE). Some trace levels of other VOCs were detected, including 1,1-DCA, 1,1-DCE, cis 1,2-DCE, trans 1,2-DCE, and xylenes, however, all these compounds were present in concentrations of less than 10 ug/kg.

Of the 34 soil samples analyzed, twenty (20) samples showed non detectable TCE levels or levels less than 10 ug/kg. Two moist samples collected near the capillary fringe (CB-1 at 35 feet and CB-2 at 40 feet) showed elevated levels of TCE (over 2,000 ug/kg) due to the influence of the groundwater contamination beneath the site. The remaining 12 samples showed TCE concentrations ranging from 12 ug/kg to a high of 630 ug/kg in CB-4 at 30-feet. Excluding the two capillary fringe samples, the average TCE concentration of the soil samples was 40 ug/kg. Only two samples with TCE levels greater than 100 ug/kg were detected; those being CB-3 at 25 feet (290 ug/kg) and CB-4 at 30 feet (630 ug/kg).

PCE was not detected in seven (7) samples and was present at levels less than 10 ug/kg in another 16 samples. PCE concentrations in the remaining samples ranged from 11 ug/kg to a high of 62 ug/kg in CB-3 at 25 feet.

The confirmation borings showed significant reductions in concentrations of both TCE and PCE when compared to nearby borings sampled by EKI in October 1997 (prior to remediation). A comparison of the pre and post remediation sample results is provided in Table 3. The most significant decrease in concentration was noted in boring B-4, which had a TCE concentration of 270,000 ug/kg at 21 feet depth prior to remediation. Nearby confirmation boring CB-1 at 20 feet showed a TCE concentration of only 35 ug/kg after remediation, a 7,700-fold reduction. Similarly, the PCE level in the same boring and depth was reduced from 140,000 ug/kg to 35 ug/kg.

Significant reductions in TCE were also observed in confirmation boring CB-2 (as compared to boring B-18), with TCE declining from 16,000 ug/kg to 2 ug/kg at 20 feet depth and from 2,000 ug/kg to 21 ug/kg at 30 feet depth. Soil samples collected from all depths and from all five confirmation borings showed significant reduction in VOC concentrations after remediation was completed.

### **3.3   VOC Leachate Testing**

The SPLP leaching test on samples from boring CB-4 at 30 feet and CB-3 at 25 feet (both predominantly clayey soils) showed a leachable TCE level of 10 ug/l and 2.7 ug/l, respectively. The concentration of TCE before the leachate test was 630 ug/kg and 290 ug/kg, respectively. Thus, it can be estimated from the SPLP test that the TCE levels leaching from the clay at the site will be very low in concentration and will not impact groundwater quality.

The SPLP leaching test on the same samples showed a leachable PCE level of 1.4 ug/l and < 1 ug/l, respectively. The concentration of PCE before the leachate test was 34 ug/kg and 62 ug/kg, respectively. Thus, it can be estimated from the SPLP test that the PCE levels leaching from the clay at the site will be very low in concentration and will not impact groundwater quality.

## **4.0 Soil Attenuation Factors and Soil Cleanup Screening Levels**

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The Los Angeles Regional Water Quality Control Board developed a procedure that was used to calculate attenuation factors (AFs) and soil cleanup screening levels (SCSLs) for all soil samples collected from the confirmation borings (LARWQCB, 1996). The AFs and SCSLs determined for the individual sample depths are included in Table 4. The analytical results for the soil samples collected at each depth are compared with the corresponding screening levels that were calculated for TCE.

IT performed a particle size distribution on the two highest TCE samples. The particle size data, in particular the clay fractions, were useful in refining the attenuation factors according to site lithology. The percent fractions of sand, silt, and clay were determined in the field by the IT geologist and supplemented by particle size laboratory data where appropriate. Table 4 summarizes the fractions of sand, silt, and clay and also shows the calculated attenuation factor and soil screening level determined for each sample following the procedure of the LARWQCB.

The TCE screening levels calculated for the Webb of California site ranged from a high of 103 ppb in CB-3 at 15 feet to a low of 6 ppb in several samples near the water table. The variation in screening levels is due primarily to the fraction of clay in the soil and the relative distance above groundwater.

Table 4 indicates that 24 of the 32 samples analyzed from the vadose zone (75%) had TCE concentrations below the corresponding screening levels. Six samples had TCE concentrations which slightly exceeded the screening level, while two samples had TCE levels more than 100 percent over the screening level. The two highest TCE concentrations that exceeded screening levels (630 mg/kg and 290 mg/kg) were both sampled from soils that were comprised predominantly of clay (CB-4 at 30 feet and CB-3 at 25 feet). The SPLP leaching tests on these two samples indicate that the leachable levels of TCE at this site will not impact groundwater quality. The leachable TCE levels from these two samples were only 10 ug/l and 2.7 ug/l, respectively.

## **5.0 Conclusions**

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This report summarizes the results of IT Corporation's sampling of five soil confirmation borings at the Jervis B. Webb Company of California (Webb of California) site in South Gate, CA. The confirmation borings were required by the Los Angeles Regional Water Quality Control Board (RWQCB) in order to fulfill the requirements for soil closure. Five soil confirmation borings (CB-1 to CB-5) were sampled at the site on September 13-14, 2001. The Webb of California site consists of the 1.4 acre Firestone property (5030 Firestone Boulevard) and the 2.8 acre Rayo property (9301 Rayo Avenue), which is now owned by Reliable Steel. Based on the extensive investigation of the site, the removal of contaminant source areas, the effective remediation of VOCs by the SVE system, the low levels of residual VOCs remaining, the consistent background levels of naturally occurring arsenic, and the lithology and current use of the site, we are requesting soil closure for the site.

No hexavalent chromium was detected in the 10 samples submitted for analysis from borings CB-1 and CB-2. The Title 22 metals analyses indicated that no elevated metal levels were present (compared to EPA's industrial PRG level) and all measured concentrations were within normal background levels. Arsenic levels ranged from 2.2 to 7.9 mg/kg in boring CB-2 and from 2.2 to 6.1 mg/kg in boring CB-1. These arsenic levels are within normal background levels (naturally occurring) for Southern California soils according to a background trace metals report published by the California Department of Toxic Substances Control (1992) and are consistent with those levels found previously at the Rayo portion of the site. The arsenic levels are also consistent with the background arsenic levels observed locally, including the nearby Cooper Drum Company site (9316 South Atlantic Avenue, South Gate (USEPA 1999)) and the Proposed Park Avenue Primary Center (SE corner of Florence Avenue and Wilcox Avenue in Cudahy (IT 2001)).

Analysis for VOCs determined that 24 of the 32 vadose zone samples (75%) did not exceed the respective screening level for TCE. The eight samples which did exceed the TCE screening level, occurred in soils which were predominantly clay in nature and which tend to retain VOCs. The highest TCE concentrations remaining in the soil were found at 30 feet depth in boring CB-4 (630 ug/kg) and at 25 feet in CB-3 (290 ug/kg). SPLP leaching tests on these two samples showed only trace levels of leachable TCE.

We believe that soil closure of the Webb of California site is warranted at this time for the following reasons:

- The Webb of California site is zoned heavy industrial and is surrounded by similar heavy industrial businesses. Webb is actively marketing the property for industrial use.
- A comprehensive and systematic investigation of the Webb of California site has been completed, including nine CPT borings, 37 soil gas probe locations, 19 soil borings, 9 PIPP groundwater samples, and 5 groundwater monitoring wells.
- The source of the TCE contamination has been removed. The clarifier was removed in June 1999 and approximately 47 cubic yards of contaminated soil surrounding the clarifier was excavated and disposed off-site.
- Removal of a concrete containment structure (6,500 gallon) and an open-bottom sump (250 gallon) at the Rayo property was completed in November 1996. A small amount of lead contaminated soil was excavated from beneath the open bottom sump and disposed off-site. Confirmation testing of the soils showed no elevated levels of metals, including arsenic. The LACDPW issued a no further action (NFA) letter for the Rayo property on December 17, 1996
- Operation of a soil vapor extraction system for the past 18 months has been successful in removing more than 155 pounds of VOCs (primarily TCE) from the soil (as of May 2001). The SVE system (best available technology) has been very effective in removing nearly all of the VOC contamination from the soil. The extracted vapor concentrations have reached a low asymptotic level (less than 20 ppmV). It is estimated that more than 88 percent of the VOCs in the soil prior to remediation have been removed by the SVE system.
- The confirmation borings verify significant decreases in both TCE and PCE levels in the soils as compared to the pre-remediation borings sampled by EKI in October 1997. The most significant reduction was observed in confirmation boring CB-1 (as compared to corresponding EKI boring B-4, which had the highest pre-remediation levels by far), with TCE declining from 270,000 ug/kg to 35 ug/kg at 20 feet depth and PCE decreasing from 140,000 ug/kg to 35 ug/kg at the same depth. Soil samples collected from all depths and from all five confirmation borings showed significant reduction in VOC concentrations after remediation was completed.
- The results of the SPLP leaching tests on two clayey samples which exhibited the highest TCE levels, showed a leachable TCE level of only 10 ug/l and 2.7 ug/l. The concentrations of TCE in the two samples prior to the leachate test were 630 ug/kg and 290 ug/kg, respectively. SPLP tests also show that PCE leachate is produced at levels of 1.4 ug/l and <

1 ug/l. Thus, the SPLP tests confirm that any TCE and PCE that could leach through the clay would be very low in concentration and will not impact groundwater quality. The average TCE leachate concentration of the two SPLP samples (6 ug/l) is of a similar magnitude as the MCL level (5 ppb). The average PCE leachate concentration (1 ug/l) is less than the MCL.

- The probability of rainwater leaching to depths of 30-40 feet at the Webb of California site is considered highly remote, since the entire site is covered with buildings or paved with asphalt and concrete and the rainwater would not easily infiltrate the underlying silty and clayey soils.

In conclusion, no further action regarding soil cleanup is warranted at this time and we request the RWQCB to issue a closure letter for the soils at the site.

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## **TABLES**

**Table 1. Title 22 Metals Analytical Results, Jervis B Webb of California, South Gate, CA**

Sample Number Date Sampled	Residential Soil PRG	Industrial Soil PRG	CB-2@15'-16' 9/13/01	CB-2@20' 9/13/01	CB-2@25' 9/13/01	CB-2@30' 9/13/01	CB-2@35' 9/13/01	CB-2@40' 9/13/01	CB-1@20' 9/13/01	CB-1@25' 9/13/01	CB-1@30' 9/13/01	CB-1@35' 9/13/01
<b>EPA 6010B</b>												
Antimony	31	820	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Arsenic (cancer endpoint)	0.39	2.7	2.2	2.1	2.6	2.3	7.9	2.3	3.5	2.5	6.1	2.2
Barium	5,400	100,000	100	110	120	130	73	97	130	170	52	61
Beryllium	150	2,200	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.54	0.57	< 0.5	< 0.5
Cadmium	9.0*	810	< 0.5	< 0.5	< 0.5	0.54	< 0.5	< 0.5	0.54	0.6	< 0.5	< 0.5
Chromium (total)	210	450	16	17	17	17	10	21	20	19	7.1	11
Cobalt	4700	100,000	11	11	12	12	7.6	11	14	14	5.6	7.7
Copper	2,900	76,000	17	19	17	21	7.7	16	20	25	6.2	9.8
Lead	400	1,000	3.6	3.3	3.6	3.9	1.5	2.5	4.4	5.3	1.2	1.4
Molybdenum	390	10,000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Nickel	150*	41,000	12	12	12	13	6.6	11	15	16	5.2	8.0
Selenium	390	10,000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Silver	390	10,000	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
Thallium	6.3	160	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Vanadium	550	14,000	36	38	38	40	26	38	44	50	19	25
Zinc	23,000	100,000	54	54	57	59	36	51	73	66	27	38
<b>EPA 7196A</b>												
Hexavalent Chromium	0.2*	64	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
<b>EPA 7471A</b>												
Mercury	23	610	< 0.1	< 0.1	< 0.1	0.24	< 0.1	0.28	0.11	< 0.1	2.5	< 0.1

Footnotes:

All data reported in milligrams per kilogram

Residential Soil PRG = EPA's Preliminary Remediation Goals for Residential Soil

Industrial Soil PRG = EPA's Preliminary Remediation Goals for Industrial Soil

\* = California Modified PRG

Laboratory analyses by Centrum Analytical Laboratories, Inc.

**Table 2. Summary VOC Analytical Results**  
**Confirmation Borings Collected 9/13/01**  
**Jervis B. Webb of California, South Gate, CA**

Boring No.	Depth (ft)	TCE	PCE	1,1-DCA	1,1-DCE	cis 1,2-DCE	trans 1,2-DCE	Xylenes, m-, p-	Xylenes, o-
CB-1	6	5	14	<1	<1	<1	<1	<1	<1
	10	3	9	<1	<1	<1	<1	<1	<1
	15	--	--	--	--	--	--	--	--
	20	35	35	<1	<1	<1	<1	<1	<1
	25	67	39	<1	<1	<1	<1	<1	<1
	30	<1	<1	<1	<1	<1	<1	<1	<1
	35	2,500*	17	4	6	7	1	3	1
CB-2	6	<1	<1	<1	<1	<1	<1	<1	<1
	10	1	2	<1	<1	<1	<1	<1	<1
	15	<1	<1	<1	<1	<1	<1	<1	<1
	20	2	2	<1	<1	<1	<1	<1	<1
	25	29	8	<1	<1	<1	<1	<1	<1
	30	21	5	<1	<1	<1	<1	<1	<1
	35	<1	<1	<1	<1	<1	<1	<1	<1
	40	3,100*	<1	<1	<1	4	<1	<1	<1
CB-3	6	<1	2	<1	<1	<1	<1	<1	<1
	10	8	5	<1	<1	<1	<1	<1	<1
	15	21	11	<1	<1	<1	<1	<1	<1
	20	29	9	<1	<1	<1	<1	<1	<1
	25	290	62	<1	<1	<1	<1	<1	<1
	30	24	1	<1	<1	<1	<1	<1	<1
	35	1	<1	<1	<1	<1	<1	<1	<1
CB-4	6	<1	2	<1	<1	<1	<1	<1	<1
	10	1	<1	<1	<1	<1	<1	<1	<1
	15	1	3	<1	<1	<1	<1	<1	<1
	20	4	1	<1	<1	<1	<1	<1	<1
	25	93	12	<1	<1	<1	<1	<1	<1
	30	630	34	2	5	<1	<1	<1	<1
	35	5	<1	<1	<1	<1	<1	<1	<1
CB-5	6	<1	<1	<1	<1	<1	<1	<1	<1
	10	1	6	<1	<1	<1	<1	<1	<1
	15	2	6	<1	<1	<1	<1	<1	<1
	20	5	7	<1	<1	<1	<1	<1	<1
	25	1	3	<1	<1	<1	<1	<1	<1
	30	12	13	<1	<1	<1	<1	<1	<1
	35	--	--	--	--	--	--	--	--

Footnotes:

PCE = tetrachloroethylene

TCE = trichloroethylene

1,1-DCA = 1,1-dichloroethane

1,1-DCE = 1,1-dichloroethene

1,2-DCE = 1,2-dichloroethene

\* Capillary fringe samples influenced by groundwater

--' = No sample recovered

All results are reported in units of micrograms per kilogram (ug/kg)

**Table 3. Comparison of Pre- and Post Remediation TCE Levels**  
**Jervis B. Webb of California, South Gate, CA**

Post-Remediation Boring No.	Depth (feet)	TCE	PCE	Pre-Remediation Boring No.	Depth (feet)	TCE	PCE
CB-1	6	5	14	B-4	6	21	76
	10	3	9		—	—	—
	15	—	—		16	92	2,200
	20	35	35		21	270,000	140,000
	25	67	39		—	—	—
	30	<1	<1		—	—	—
	35	2,500*	17		—	—	—
CB-2	6	<1	<1	B-18	6	—	—
	10	1	2		11	110	400
	15	<1	<1		16	610	370
	20	2	2		21	16,000	660
	25	29	8		27	750	93
	30	21	5		31	2,000	140
	35	<1	<1		36	56	<1
	40	3,100*	<1		41	2300*	91*
CB-3	6	<1	2	B-7	6	19	55
	10	8	5		11	<1	<1
	15	21	11		15	—	—
	20	29	9		20	—	—
	25	290	62		25	—	—
	30	24	1		30	—	—
	35	1	<1		35	—	—
CB-4	6	<1	2	B-15	6	—	—
	10	1	<1		10	<1	<1
	15	1	3		16	<1	<1
	20	4	1		20.5	<1	<1
	25	93	12		26.5	380	54
	30	680	34		31	520	41
	35	5	<1		35.5	140	26
CB-5	6	<1	<1	B-16	5	—	—
	10	1	6		9.5	<1	<1
	15	2	6		16	<1	<1
	20	5	7		20.5	<1	27
	25	1	3		26.5	<1	41
	30	12	13		31	<1	47
	35	—	—		35.5	<1	27

Footnotes:

PCE = tetrachloroethylene

TCE = trichloroethylene

\* Capillary fringe samples influenced by groundwater

— = No sample collected

All results are reported in units of micrograms per kilogram (ug/kg)

Post-Remediation samples collected on September 13-14, 2001

Pre-Remediation samples collected on October 1997

**Table 4. Attenuation Factors and Soil Cleanup Levels for TCE**  
**Jervis B. Webb of California, South Gate, CA**

Boring No.	Sample Depth (ft)	Distance Above Ground Water (ft)	Gravel Fraction	Sand Fraction	Silt Fraction	Clay Fraction	Weighted Attenuation Factor	Soil Screening Level for TCE (ppb)	TCE Laboratory Result (ug/kg)	Comment
CB-1	6	34	0.00	0.58	0.40	0.02	4	21	5	14
	10	30	0.00	0.10	0.30	0.60	17	87	3	9
	15	25	0.00	0.05	0.55	0.40	13	67	—	No recovery
	20	20	0.00	0.10	0.50	0.40	7	34	38	35
	25	15	0.00	0.05	0.35	0.60	9	45	67	35
	30	10	0.00	0.70	0.28	0.02	1	6	<1	C1
	35	5	0.00	0.30	0.56	0.04	1	6	2,500	7
CB-2	6	34	0.00	0.05	0.80	0.15	8	40	<1	21
	10	30	0.00	0.05	0.55	0.40	13	67	1	2
	15	25	0.00	0.05	0.55	0.40	13	67	<1	11
	20	20	0.00	0.10	0.60	0.30	6	29	2	2
	25	15	0.00	0.05	0.65	0.30	6	30	29	3
	30	10	0.00	0.05	0.20	0.75	6	28	21	5
	35	5	0.00	0.05	0.20	0.75	6	28	<1	<1
CB-3	6	34	0.00	0.40	0.58	0.02	5	23	<1	2
	10	30	0.00	0.10	0.60	0.30	11	56	8	5
	15	25	0.00	0.05	0.20	0.75	21	103	21	11
	20	20	0.00	0.10	0.50	0.40	7	34	29	9
	25	15	0.00	0.07	0.65	0.28	6	28	24	ICL SPLP leachate = 2.7 ug/l 62
	30	10	0.00	0.10	0.60	0.30	3	14	24	1
	35	5	0.00	0.60	0.38	0.02	1	6	1	21 24 36
CB-4	6	34	0.00	0.50	0.45	0.05	5	25	<1	2
	10	30	0.00	0.80	0.18	0.02	4	19	1	21
	15	25	0.00	0.05	0.35	0.60	18	88	1	3
	20	20	0.00	0.50	0.30	0.20	4	20	4	1
	25	15	0.00	0.10	0.30	0.60	9	44	93	12 ✓
	30	10	0.00	0.32	0.47	0.21	2	11	93	SPLP leachate = 10 ug/l
	35	5	0.00	0.20	0.20	0.60	5	23	5	<1
CB-5	6	34	0.00	0.20	0.75	0.05	6	28	<1	<1
	10	30	0.00	0.05	0.45	0.50	15	77	1	6
	15	25	0.00	0.10	0.60	0.30	11	56	2	6

**Table 4. Attenuation Factors and Soil Cleanup Levels for TCE**  
**Jervis B. Webb of California, South Gate, CA**

Boring No.	Sample Depth (ft)	Distance Above Ground Water (ft)	Gravel Fraction	Sand Fraction	Silt Fraction	Clay Fraction	Weighted Attenuation Factor	Soil Screening Level for TCE (ppb)	TCE Laboratory Result (ug/kg)	Comment
CB-5	20	20	0.00	0.05	0.90	0.05	3	17	5	7
	25	15	0.00	0.05	0.25	0.70	10	50	1	3
	30	10	0.00	0.05	0.15	0.80	6	29	12	13
	35	5	0.00	0.70	0.25	0.05	1	7	—	No recovery

Footnotes:

ug/kg = micrograms per kilogram

Bold = Lab result exceeds soil screening level

Soil Screening Level = Attenuation Factor x MCL

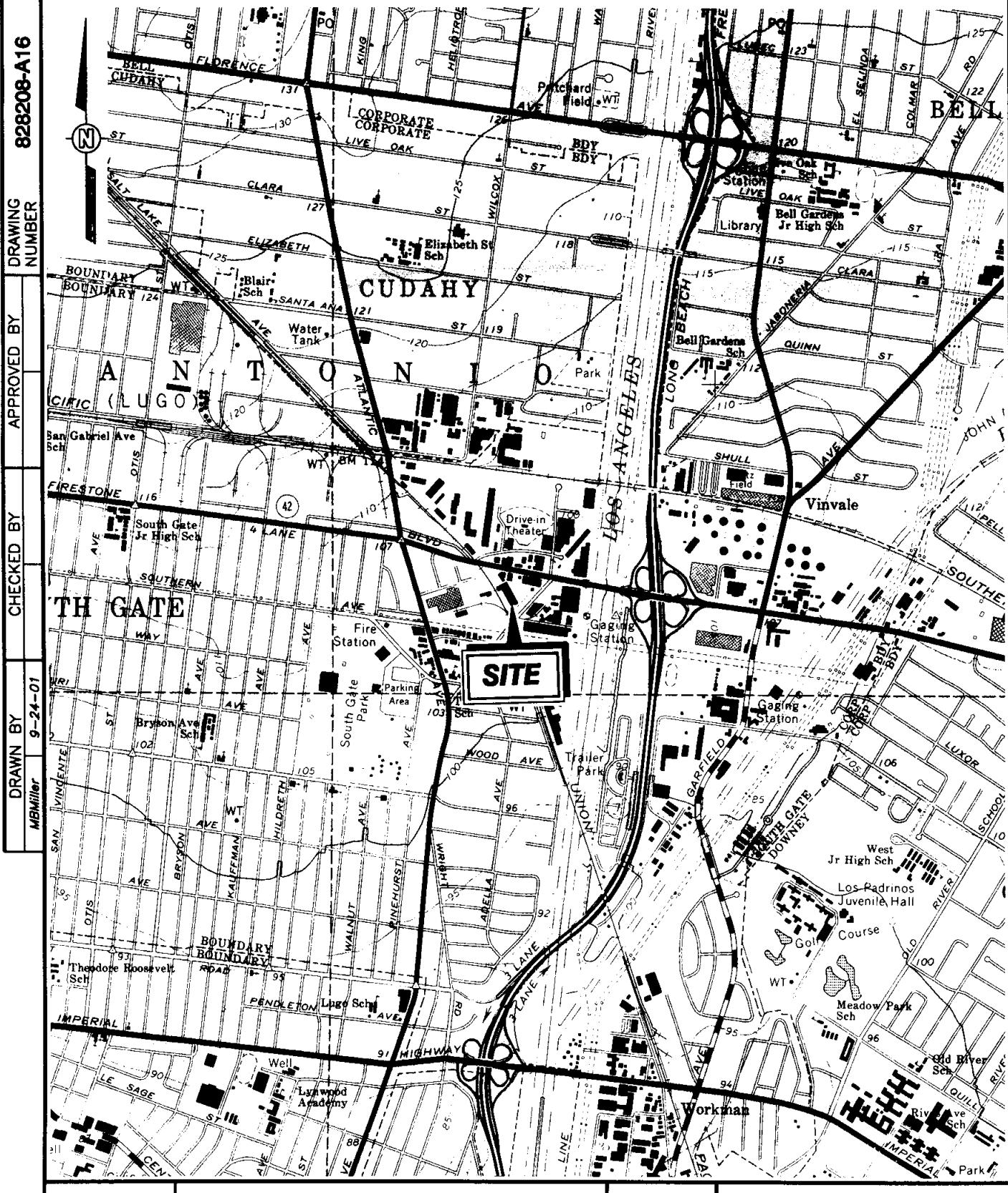
Attenuation Factor<sub>40</sub> = (gravel fraction x 1 + sand fraction x 3 + silt fraction x 5 + clay fraction x 26)

Attenuation Factor<sub>20</sub> = (gravel fraction x 1 + sand fraction x 1 + silt fraction x 3 + clay fraction x 13)

Attenuation Factor<sub>10</sub> = (gravel fraction x 1 + sand fraction x 1 + silt fraction x 1 + clay fraction x 7)

Attenuation Factor calculated according to LARWQCB Interim Site Assessment & Cleanup Guidebook, Table 5-1 (1996)

## **FIGURES**



SCALE  
0 2000 4000 FEET



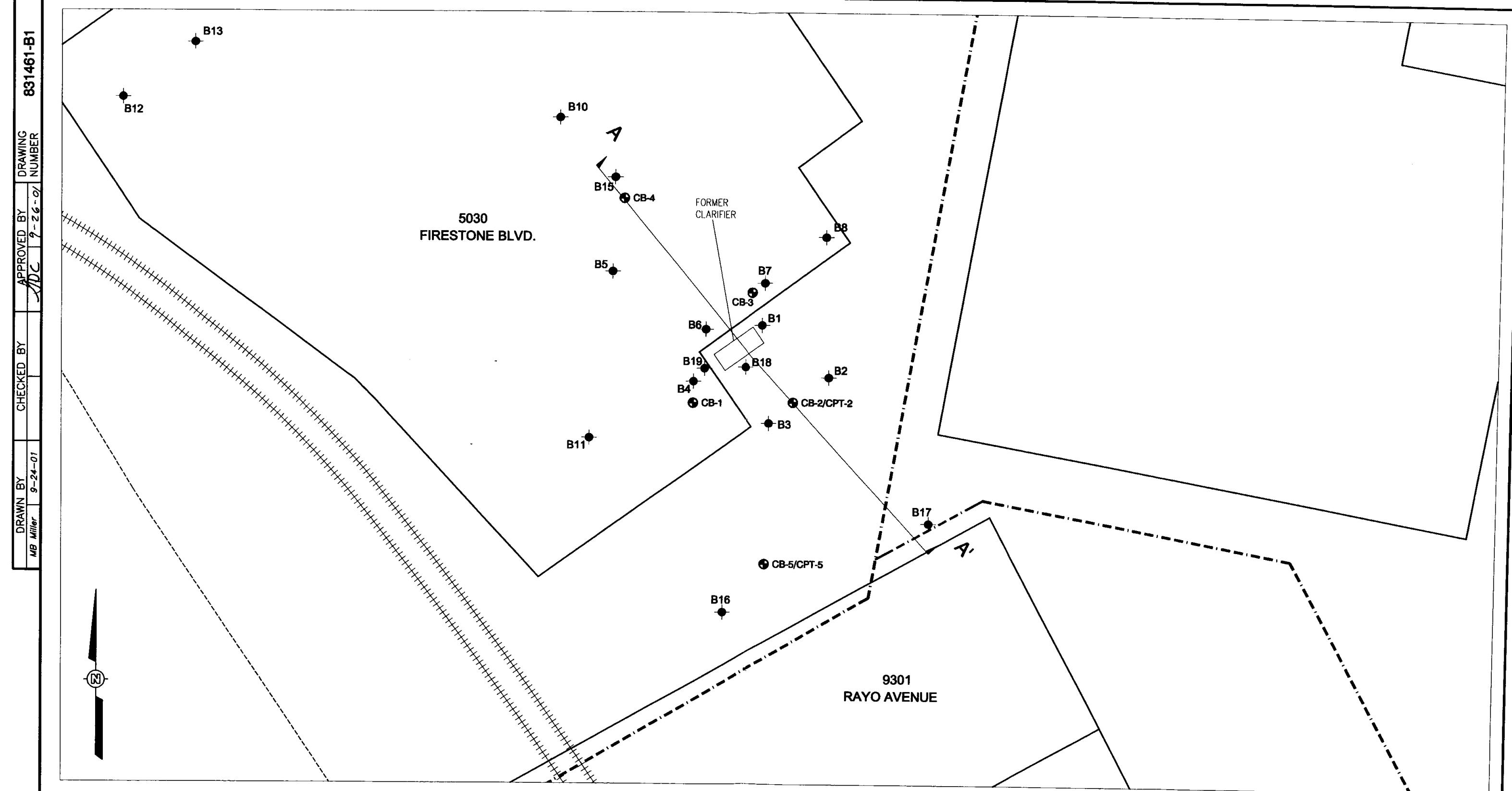
JERVIS B. WEBB  
OF CALIFORNIA

REFERENCE:  
7.5 MINUTE USGS TOPOGRAPHIC MAP OF  
SOUTH GATE, CALIFORNIA QUADRANGLE  
DATE: 1964, PHOTOREVISED: 1981  
SCALE: 1:2400

JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

FIGURE 1  
SITE LOCATION MAP

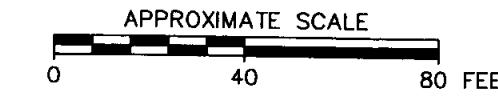
001527



LEGEND

- CB-1 Confirmation Boring Location
- B1 Soil Boring Location
- A-A' Geologic Cross Section Locations
- - - Flood Control District Easement
- - - Property Line
- ||||| Union Pacific Rail Road

NOTE: All locations are approximate.



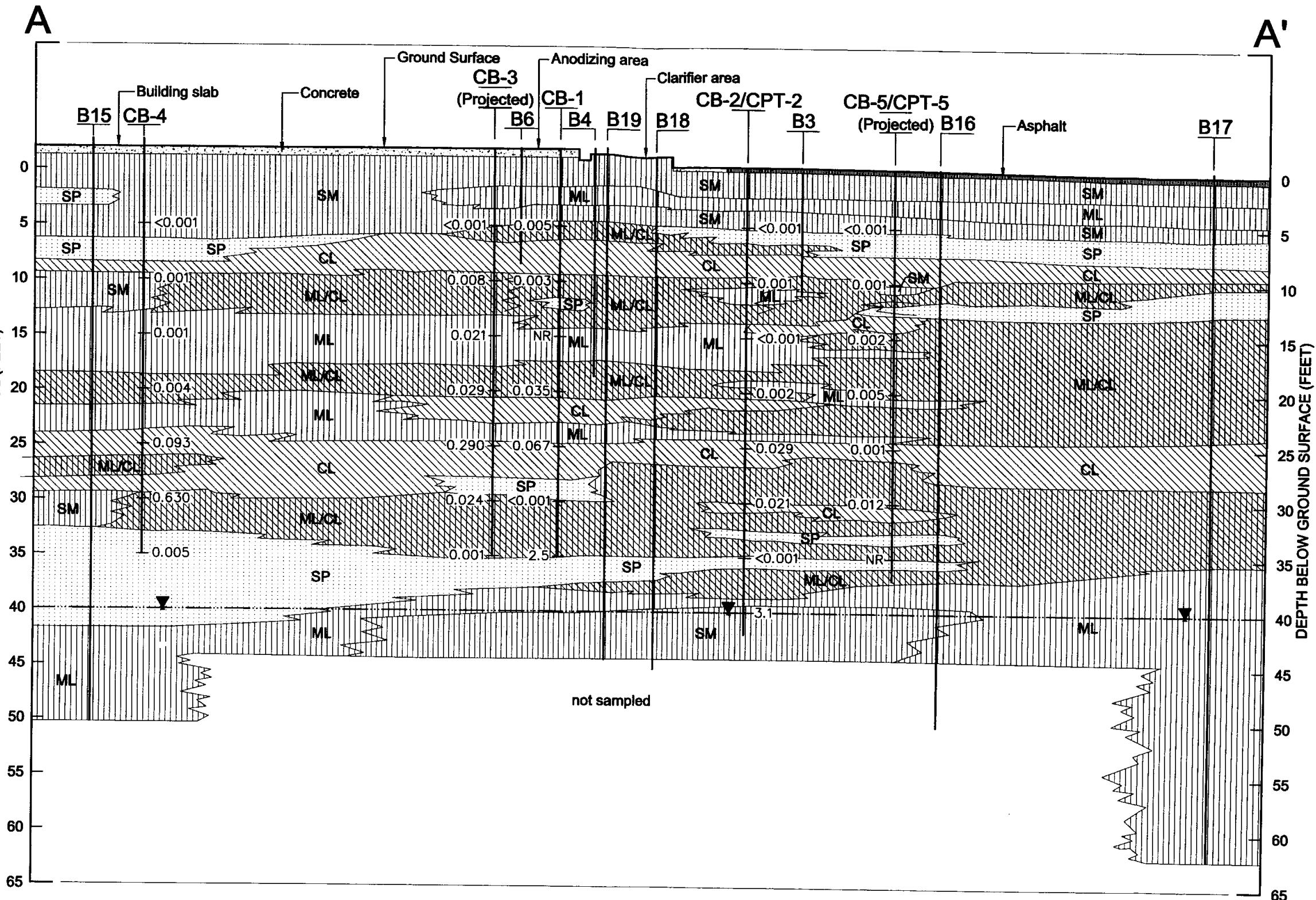
JERVIS B. WEBB  
OF CALIFORNIA

FIGURE 2  
CONFIRMATION SOIL BORING LOCATIONS

JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

001529

DRAWING NUMBER 831461-B2  
 DRAWN BY MBB/HDS CHECKED BY JJC APPROVED BY JJC  
 9-24-01 9-26-01

**LEGEND**

▼ Approximate location of groundwater table      SM Silty Sand

— Lithologic contact

CL Clay

ML/CL Silty Clay/Clayey Silt

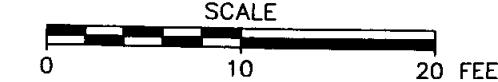
ML Silt or Sandy Silt

SP Poorly Graded Sand

Concentration of TCE in soil (mg/Kg)

0.001 Depth of sample where shown

NR No Recovery



JERVIS B. WEBB  
OF CALIFORNIA

**FIGURE 3**  
**GEOLOGIC CROSS-SECTION A-A'**

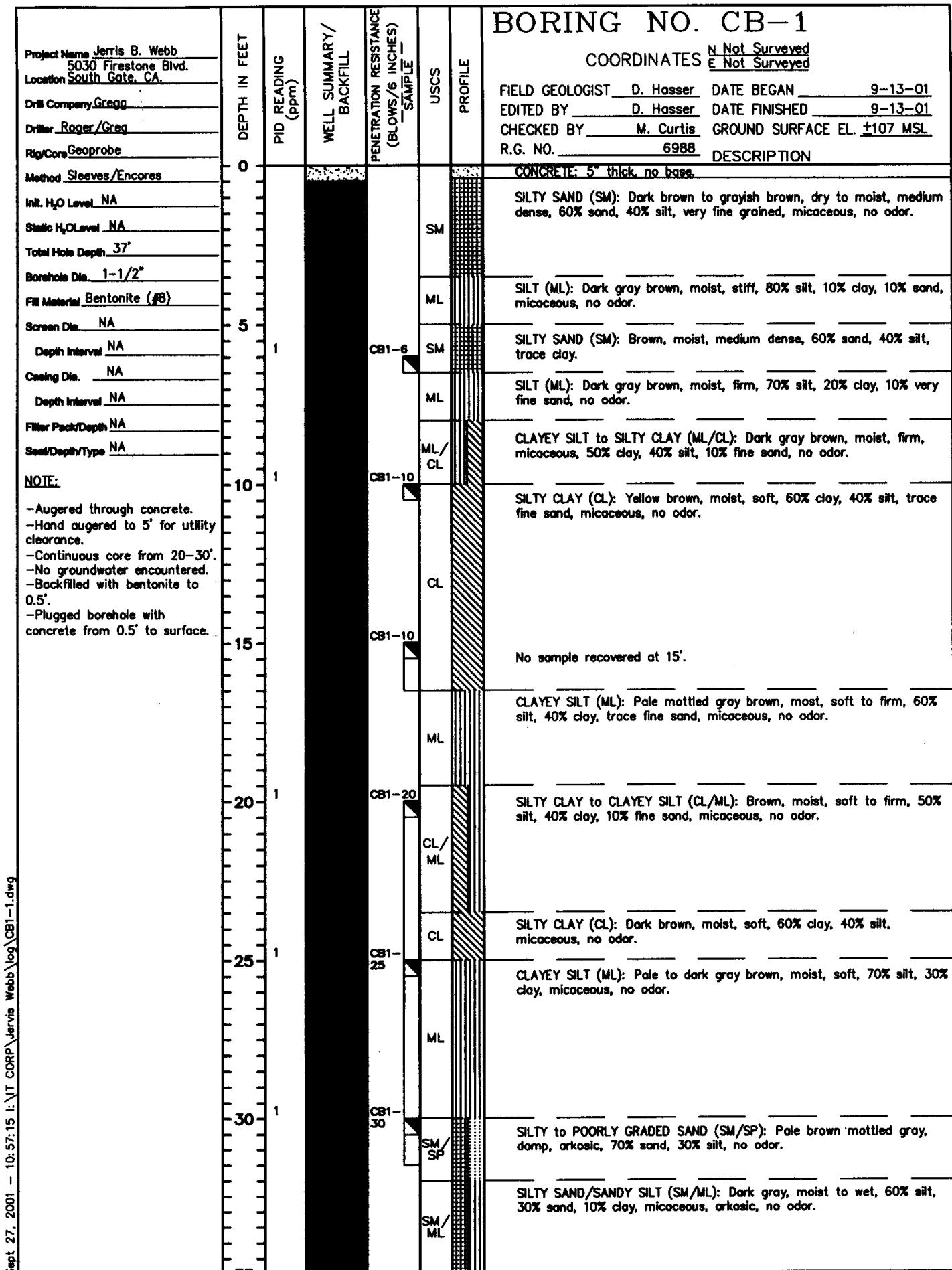
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

**APPENDIX**  
**A**

**APPENDIX A**

**SOIL BORING LOGS**

**AND CPT LOGS**



PROJECT NO. 831461  
CLIENT: JERVIS B. WEBB  
SEE LEGEND FOR LOGS AND TEST PITS



001532

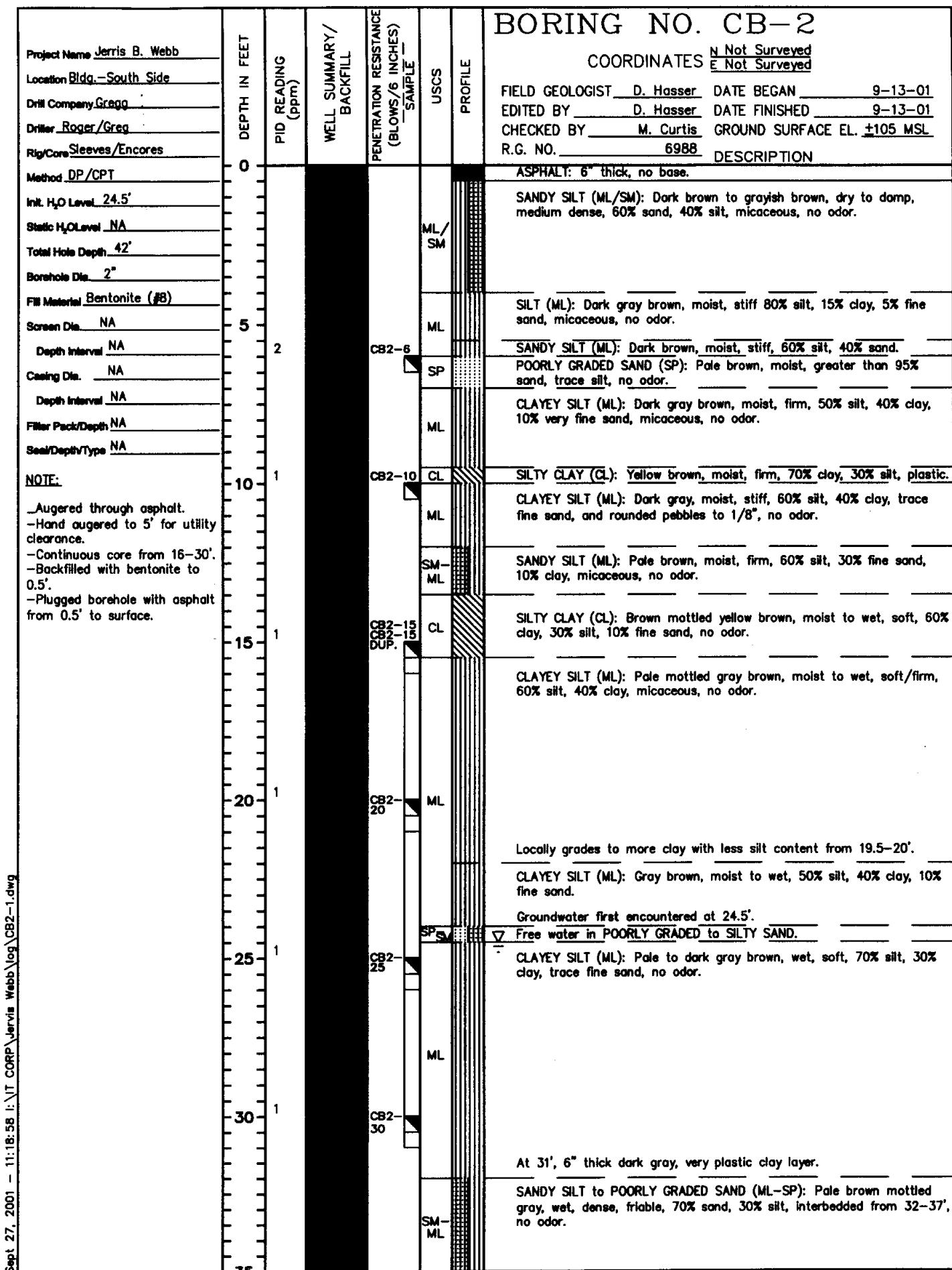
		BORING NO. CB-1					
Project Name Jervis B. Webb 5030 Firestone Blvd. Location South Gate, CA.		COORDINATES <u>N</u> Not Surveyed <u>E</u> Not Surveyed					
Drill Company Gregg Driller Roger/Greg Rig/Core Geoprobe		FIELD GEOLOGIST D. Hasser DATE BEGAN 9-13-01 EDITED BY D. Hasser DATE FINISHED 9-13-01 CHECKED BY M. Curtis GROUND SURFACE EL. +107 MSL R.G. NO. 6988 DESCRIPTION					
DEPTH IN FEET	PID READING (ppm)	WELL SUMMARY/ BACKFILL	PENETRATION RESISTANCE (BLOWS/6 INCHES) —SAMPLE—	USCS	PROFILE		
35	-	CB1- 35	<input type="checkbox"/> SM/ ML			SILTY SAND/SANDY SILT (SM/ML); Dark gray, moist to wet, 60% silt, 30% sand, 10% clay, micaceous, arkosic, no odor.	
Total Hole Depth 37'						TOTAL DEPTH = 37 FEET	
Borehole Dia. 1-1/2"							
Fill Material Bentonite (#8)							
Screen Dia. NA	40						
Depth Interval NA							
Casing Dia. NA							
Depth Interval NA							
Filter Pack/Depth NA							
Seal/Depth/Type NA							
NOTE:	45						
-Augered through concrete. -Hand augered to 5' for utility clearance. -Continuous core from 20-30'. -No groundwater encountered. -Backfilled with bentonite to 0.5'. -Plugged borehole with concrete from 0.5' to surface.	50						
	55						
	60						
	65						
	70						

Sept 27, 2001 - 11:18:16 I:\IT CORP\Jervis Webb\log\CB1-2.dwg

PROJECT NO. 831461  
CLIENT: JERVIS B. WEBB  
SEE LEGEND FOR LOGS AND TEST BITS



001533



Sept 27, 2001 - 11:18:58 :: \IT CORP\Jervis Webb\log\CB2-1.dwg

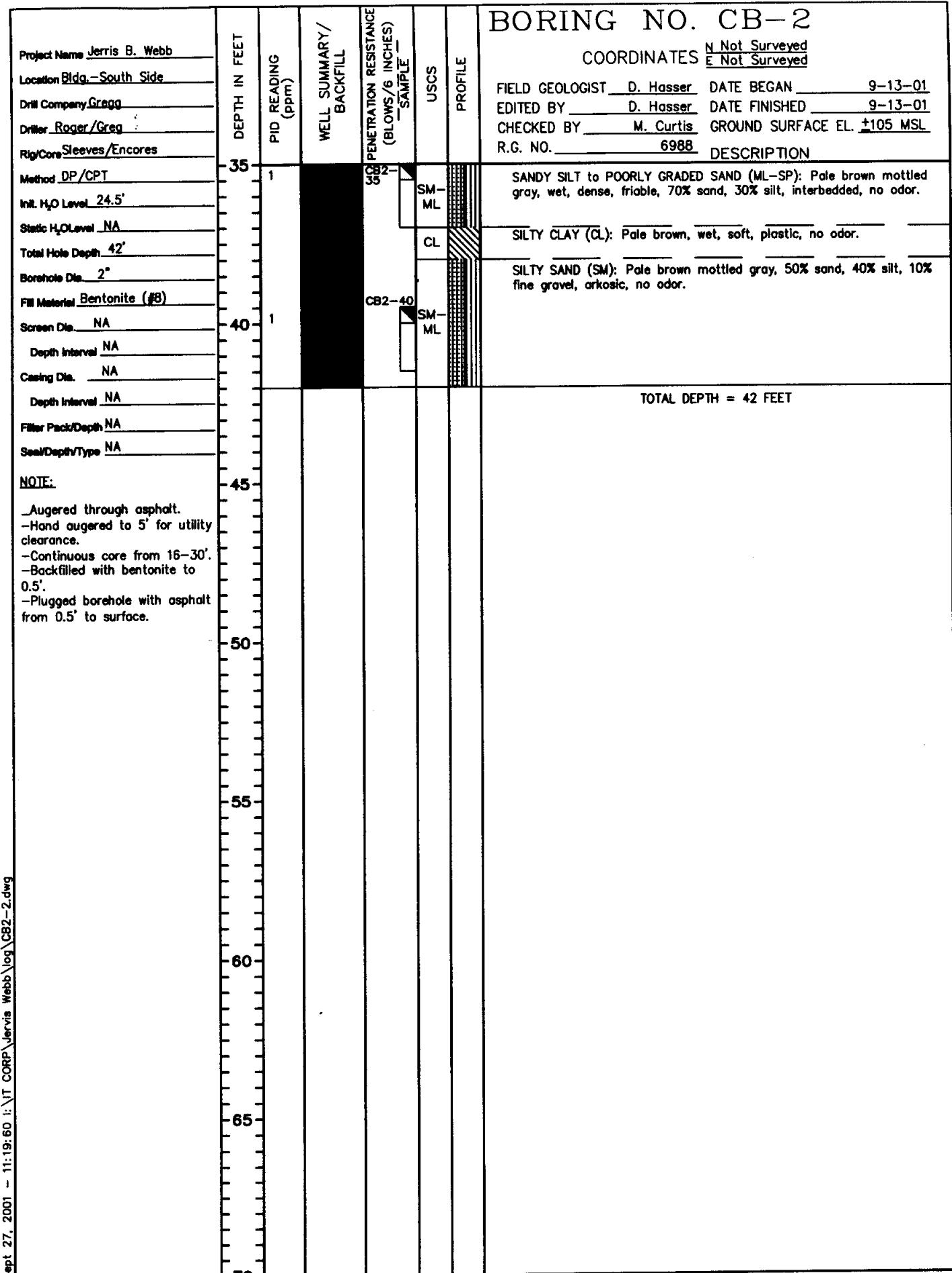
PROJECT NO. 831461

CLIENT: JERVIS B. WEBB

SEE LEGEND FOR LOGS AND TEST PITS



001534



PROJECT NO. 831461

CLIENT: JERVIS B. WEBB

SEE LEGEND FOR LOGS AND TEST PITS  
FOR EXPLANATION OF SYMBOLS AND TERMS



001535

BORING NO. CB-3							
				COORDINATES <u>N Not Surveyed</u> <u>E Not Surveyed</u>			
				FIELD GEOLOGIST <u>D. Hasser</u>	DATE BEGAN <u>9-14-01</u>		
				EDITED BY <u>D. Hasser</u>	DATE FINISHED <u>9-14-01</u>		
				CHECKED BY <u>M. Curtis</u>	GROUND SURFACE EL. <u>+107 MSL</u>		
				R.G. NO. <u>6988</u>	DESCRIPTION		
Project Name <u>Jerris B. Webb</u>	DEPTH IN FEET	PID READING (ppm)	WELL SUMMARY/ BACKFILL	USCS	PROFILE		
5030 Firestone Blvd.			Penetration Resistance (Blows/6 inches) — SAMPLE				
Location <u>South Gate, CA</u>							
Drill Company <u>Graig</u>							
Driller <u>Roger/Greg</u>							
Rig/Core <u>Geoprobe</u>							
Method <u>Sleeves/Encores</u>	0					CONCRETE: 5" thick, no base.	
Init. H <sub>2</sub> O Level <u>22.5'</u>						SILTY SAND (SM): Dark gray/brown, dry to moist, 60% sand, 40% silt, no odor.	
Static H <sub>2</sub> O Level <u>NA</u>				SM			
Total Hole Depth <u>37'</u>							
Borehole Dia. <u>1-1/2"</u>							
Fill Material <u>Bentonite (#8)</u>							
Screen Dia. <u>NA</u>	5						
Depth Interval <u>NA</u>	7						
Casing Dia. <u>NA</u>			CB3-6	ML		SILTY SILT (ML): Yellow brown, moist, stiff, 60% silt, 40% sand, trace clay, micaceous, arkosic, no odor.	
Depth Interval <u>NA</u>				SM			
Filter Pack/Depth <u>NA</u>						SILTY SAND (SM): Dark gray, dry to moist, medium dense, 50% sand, 40% silt, 10% clay, no odor.	
Seal/Depth/Type <u>NA</u>				ML		SILTY SILT (ML): Brown, moist, soft to firm, 70% silt, 30% sand.	
<b>NOTE:</b>	10					Gradational contact at 10.5' to 11'.	
-Augered through concrete.						SILTY CLAY to CLAYEY SILT (CL-ML): Pale brown, moist to wet, 60% silt, 30% clay, 10% fine sand, micaceous, low plasticity, no odor.	
-Hand augered to 5' for utility clearance.							
-Continuous core from 20-30'.							
-Backfilled with bentonite to 0.5'.							
-Plugged borehole with concrete 0.5' to surface.							
	15					SILTY CLAY (CL): Dark gray, wet to near saturation, 80% clay, 20% silt, trace fine sand and gravel, high plasticity, no odor.	
	20					CLAYEY SILT (ML): Dark gray, moist to wet, 50% silt, 40% clay, 10% fine sand, micaceous, no odor.	
	25					Groundwater first encountered at approximately 22.5'.	
	30					CLAY (CL): Dark gray, moist to wet, stiff, greater than 80% clay no odor.	
						SILT (ML): Pale brown, wet, micaceous, greater than 90% silt, no odor.	
						SILTY CLAY (CL): Brown, wet, soft/firm, 70% clay, 30% silt, trace sand and gravel, micaceous, no odor.	
						CLAYEY SILT (ML): Pale to gray brown, moist, firm; 60% silt, 30% clay, 10% sand, micaceous, no odor.	
						SILTY CLAY (CL): Dark gray, 90% clay, 10% silt, micaceous, no odor.	
						SANDY SILT (ML): Dark gray, moist, stiff, 60% fine sand, 40% silt, arkosic, micaceous, no odor.	
Sept 27, 2001 - 11:21:11 I:\IT CORP\Jerris Webb\log\CB3-1.dwg	45						

PROJECT NO. 831461  
CLIENT: JERVIS B. WEBB  
SEE LEGEND FOR LOGS AND TEST PITS



001536

## BORING NO. CB-3

Project Name Jervis B. Webb  
5030 Firestone Blvd.  
Location South Gate, CA.

Drill Company Gregg  
Driller Roger/Greg  
Rig/Cores Geoprobe

Method Sleeves/Encores  
Init. H<sub>2</sub>O Level 22.5'

Static H<sub>2</sub>O Level NA

Total Hole Depth 37'

Borehole Dia. 1-1/2"

Fill Material Bentonite (#8)

Screen Dia. NA

Depth Interval NA

Casing Dia. NA

Depth Interval NA

Filter Pack/Depth NA

Seal/Depth/Type NA

## NOTE:

- Augered through concrete.
- Hand augered to 5' for utility clearance.
- Continuous core from 20-30'.
- No groundwater encountered.
- Backfilled with bentonite to 0.5'.
- Plugged borehole with concrete from 0.5' to surface.

DEPTH IN FEET

PID READING  
(ppm)WELL SUMMARY/  
WELL BACKFILLPENETRATION RESISTANCE  
(BLOWS/6 INCHES)  
—SAMPLE—

USCS

PROFILE

COORDINATES

N Not Surveyed  
E Not Surveyed

FIELD GEOLOGIST D. Hasser DATE BEGAN 9-13-01  
EDITED BY D. Hasser DATE FINISHED 9-13-01  
CHECKED BY M. Curtis GROUND SURFACE EL. +107 MSL  
R.G. NO. 6988

## DESCRIPTION

SANDY SILT (ML): Dark gray, moist, stiff, 60% fine sand, 40% silt, arkosic, micaceous, no odor.

TOTAL DEPTH = 37 FEET

35  
40  
45  
50  
55  
60  
65  
7040  
45  
50  
55  
60  
65  
70

		BORING NO. CB-4						
		COORDINATES			DESCRIPTION			
		N Not Surveyed		E Not Surveyed				
Project Name Jerris B. Webb 5030 Firestone Blvd. Location South Gate, CA.		FIELD GEOLOGIST D. Hasser EDITED BY D. Hasser CHECKED BY M. Curtis R.G. NO. 6988			DATE BEGAN 9-14-01 DATE FINISHED 9-14-01 GROUND SURFACE EL. +107 MSL			
Drill Company Gregg Driller Roger/Greg Rig/Core Geoprobe								
Method Sleeves/Encores Init. H <sub>2</sub> O Level 26' Static H <sub>2</sub> O Level NA Total Hole Depth 37' Borehole Dia. 1-1/2" Fill Material Bentonite (#3) Screen Dia. NA Depth Interval NA Casing Dia. NA Depth Interval NA Filter Pack/Depth NA Seal/Depth/Type NA		WELL SUMMARY/ BACKFILL			PENETRATION RESISTANCE (BLOWS/6 INCHES) SAMPLE			PROFILE
		DEPTH IN FEET	PID READING (ppm)		USCS			
		0						CONCRETE: 5" thick, no base.
								SILTY SAND (SM): Dark brown, moist, loose, 50% sand, 45% silt, 5% clay/gravel, no odor.
		5		CB4-6	SM			
		10		CB4-10	SP-SM			SILTY to POORLY GRADED SAND (SP-SM): Yellow brown, moist, loose, 80% very fine sand, 20% silt, arkosic, no odor.
		15		CB4-15	ML			CLAYEY SILT with SAND (ML): Dark gray brown mottled yellow brown, moist, soft to firm, 60% silt, 35% clay, 5% very fine sand, no odor.
		20		CB4-20	ML-CL			CLAYEY SILT to SILTY CLAY (ML-CL): Brown, moist, firm, 60% silt, 40% silt, trace fine sand, micaceous, no odor. Increased moisture content below 15'.
		25		CB4-25	ML			SANDY SILT (ML): Brown mottled yellow brown, moist, stiff, 60% silt, 30% sand, 10% clay, micaceous, low plasticity, no odor.
		30		CB4-30	CL			SILTY CLAY (CL): Dark gray to brown, wet, soft to firm, 60% clay, 30% silt, 10% fine sand, no odor.
					ML			SILT (ML): Yellow brown, moist, greater than 80% silt, 5% fine sand, 5% clay, no odor.
					CL			SILTY CLAY (CL): Dark gray mottled pale brown, moist, stiff, micaceous, 60% clay, 35% silt, 5% sand, no odor, plastic.
								Groundwater first encountered at approximately 26'.
								CLAYEY SILT (ML): Yellow brown, wet/saturated, 60% silt, 35% clay, 5% sand, no odor.
								SANDY SILT (ML): Brown, wet, no odor.
								CLAYEY SILT (ML): Dark gray brown, wet, stiff, 60% silt, 40% clay, no odor.
								SILTY CLAY (CL): Dark gray, wet, stiff, greater than 80% clay, 20% silt, no odor.
								SANDY SILT (ML): Pale brown, wet, stiff, 60% silt, 40% sand, no odor.
								SILTY SAND (SM-SP): Dark yellow brown, damp, hard, friable, 65% fine sand, 35% silt, no odor.
Sept 27, 2001 - 11:23:02 I:\UT CORP\Jerris Webb\log\CB4.dwg		35						

PROJECT NO. 831461  
CLIENT: JERVIS B. WEBB  
SEE LEGEND FOR LOGS AND TEST PITS  
FOR EXPLANATION OF SYMBOLS AND TERMS



001538

## BORING NO. CB-4

COORDINATES N Not Surveyed  
E Not SurveyedFIELD GEOLOGIST D. Hasser DATE BEGAN 9-13-01  
EDITED BY D. Hasser DATE FINISHED 9-13-01  
CHECKED BY M. Curtis GROUND SURFACE EL. ±107 MSL  
R.G. NO. 6988 DESCRIPTION

Project Name Jerris B. Webb  
5030 Firestone Blvd.  
Location South Gate, CA.

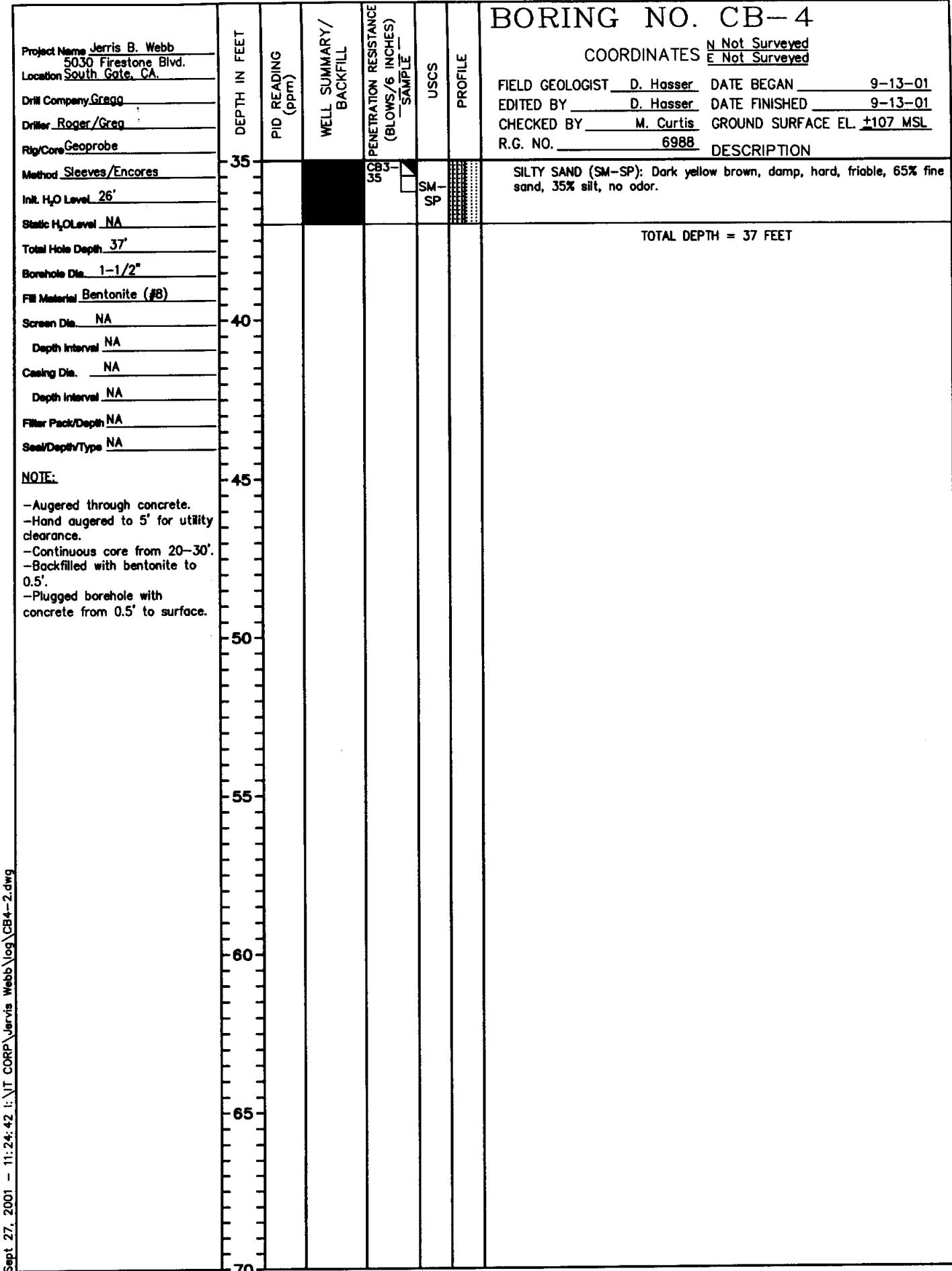
Drill Company Gregg  
Driller Roger/Greg  
Rig/Core Geoprobe

Method Sleeves/Encores  
Init. H<sub>2</sub>O Level 26'  
Static H<sub>2</sub>O Level NA  
Total Hole Depth 37'  
Borehole Dia. 1-1/2"  
Fill Material Bentonite (#8)  
Screen Dia. NA  
Depth Interval NA  
Casing Dia. NA  
Depth Interval NA  
Filter Pack/Depth NA  
Seal/Depth/Type NA

## NOTE:

- Augered through concrete.
- Hand augered to 5' for utility clearance.
- Continuous core from 20-30'.
- Backfilled with bentonite to 0.5'.
- Plugged borehole with concrete from 0.5' to surface.

Sept 27, 2001 - 11:24:42 : \IT CORP\Jerris Webb\log\CB4-2.dwg



PROJECT NO. 831461

CLIENT: JERRIS WEBB

SEE LEGEND FOR LOGS AND TEST PITS  
FOR EXPLANATION OF SYMBOLS AND TERMS

001539

## BORING NO. CB-5

Project Name Jarris B. Webb  
5030 Firestone Blvd.  
Location South Gate, CA.

Drill Company Gregg  
Driller Roger/Greg  
Rig/Core CPT Rig

DEPTH IN FEET  
PID READING  
(ppm)

WELL SUMMARY/  
BACKFILL  
PENETRATION RESISTANCE  
(BLOWS/6 INCHES)  
SAMPLE

USCS

PROFILE

COORDINATES N Not Surveyed  
E Not Surveyed

FIELD GEOLOGIST D. Hasser DATE BEGAN 9-13-01  
EDITED BY D. Hasser DATE FINISHED 9-13-01  
CHECKED BY M. Curtis GROUND SURFACE EL. +105 MSL  
R.G. NO. 6988 DESCRIPTION

Method Cone Panteometer

Init. H<sub>2</sub>O Level 15' & 26'

Static H<sub>2</sub>O Level NA

Total Hole Depth 37'

Borehole Dia. 1-1/2"

Fill Material Bentonite (#8)

Screen Dia. NA

Depth Interval NA

Casing Dia. NA

Depth Interval NA

Filter Pack/Depth NA

Seal/Depth/Type NA

NOTE:

- Augered through asphalt.
- Hand augered to 5' for utility clearance.
- Continuous core 20' to 30'.
- Backfilled with bentonite to 0.5'.
- Plugged borehole with asphalt from 0.5' to surface.

0  
5  
9  
10  
15  
20  
25  
30  
35

CB5-6  
CB5-10  
CB5-15  
CB5-20  
CB4-25  
CB5-30

SM-SP  
ML-SM  
ML  
SM-ML  
SP-SM  
SM-ML  
CL-ML  
ML-CL  
SP  
CL-ML  
ML-CL  
ML  
CL-ML  
CL  
CL-ML  
CL

SILTY to POORLY GRADED SAND (SM-SP): Dark brown (10YR 4/1), dry to moist, medium dense, 90% fine sand, 10% silt, trace 1/8" gravel, friable, micaceous, no odor.  
SANDY SILT (ML): Gray brown to olive brown, dry to moist, stiff, micaceous, 70% silt, 30% sand, no odor.  
SILT (ML): Gray brown, moist, firm, trace clay and gravel, no odor.  
SANDY SILT (SM-ML): Dark gray brown, moist, stiff, porous, arkosic, 70% silt, 20% sand, trace to 5% clay and gravel, no odor.  
SAND (SP): Pale brown, damp, medium dense, friable.  
SANDY SILT (SM-ML): Gray brown, moist, soft to firm, 60% silt, 20% very fine sand, 10% clay, no odor.  
SILTY CLAY (ML-CL): Dark gray, moist, firm, low plasticity, 60% clay, 30% silt, 10% very fine sand and few 1/8" rounded pebbles, no odor.  
CLAYEY SILT to SILTY CLAY (ML-CL): Olive gray, moist to wet, soft to firm, 50% clay, 50% silt, trace fine sand, no odor.  
POORLY GRADED SAND (SP): Light brown, wet to near saturation, arkosic, micaceous, 1/8" rounded gravel, no odor.  
SILTY CLAY with SAND (CL-ML): Olive, moist to wet, soft to firm, 50% clay, 40% silt, 10% sand, plastic, no odor.  
Near saturation at 15', some free water.  
CLAYEY SILT (ML): Olive, saturated, soft, 60% silt, 10% clay, 10% sand and gravel, no odor.  
SILT (ML): Dark gray, wet, greater than 95% silt, trace clay/sand, no odor.  
SILTY CLAY to CLAYEY SILT (CL-ML): Dark brown, soft, 50% silt, 50% clay, trace fine sand and 1/8" rounded gravel, no odor.  
Groundwater encountered at approximately 26'.  
SILTY CLAY (CL): Brown, wet, 70% clay, 30% silt, trace very fine sand, low plasticity, no odor.  
CLAYEY SILT (ML): Olive brown, wet, soft, 60% silt, 40% clay, trace fine micaceous sand and 1/4" rounded pebbles, no odor.  
SILTY CLAY (CL): Brown, wet, greater than 80% clay, 20% silt, plastic, no odor.  
SILTY SAND (SM): Dark brown, wet, dense, friable, 70% fine to medium sand, 30% silt, arkosic, micaceous, no odor.

No sample recovery from 35-36' and 36-37' to hard and dense.

BORING NO. CB-5						
				COORDINATES		
				N Not Surveyed E Not Surveyed		
DEPTH IN FEET	PID READING (PPM)	WELL SUMMARY/ BACKFILL	PENETRATION RESISTANCE (BLOWS/6 INCHES) SAMPLE	USCS	PROFILE	DESCRIPTION
35		CB3- 35	<input checked="" type="checkbox"/> SM			SILTY SAND (SM): Dark brown, wet, dense, friable, 70% fine to medium sand, 30% silt, arkosic, micaceous, no odor. No sample recovery form 35-36' and 36-37' to hard and dense.
						TOTAL DEPTH = 37 FEET
40						
45						
50						
55						
60						
65						
70						

Sept 27, 2001 - 11:26:42 : \IT CORP\Jervis Webb\log\CB5-2.dwg

PROJECT NO. 831461

CLIENT: JERVIS B. WEBB

SEE LEGEND FOR LOGS AND TEST PITS  
FOR EXPLANATION OF SYMBOLS AND TERMS



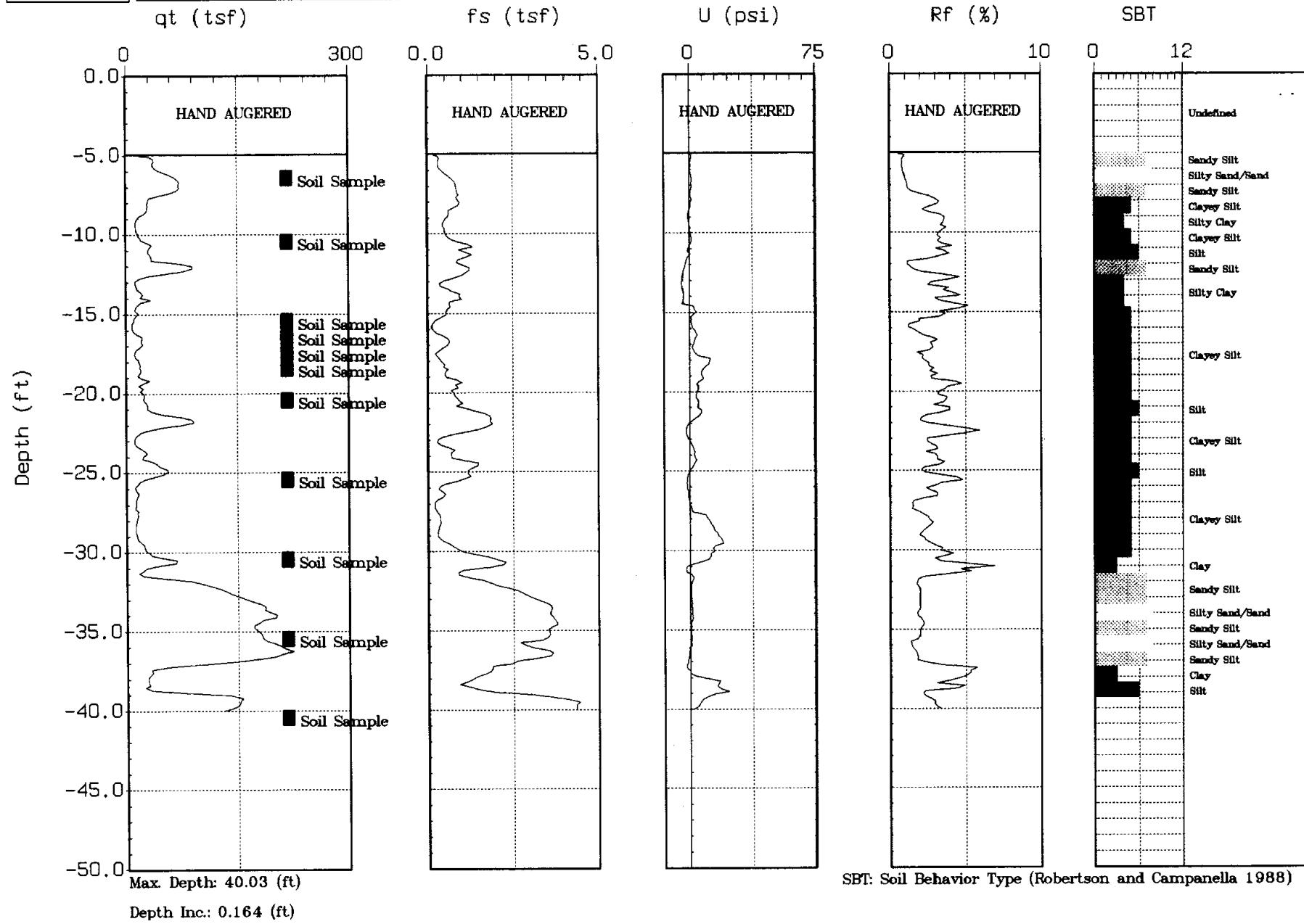
001541



## IT CORPORATION

Site : JERVIS B. WEBB  
Location : CPT-2

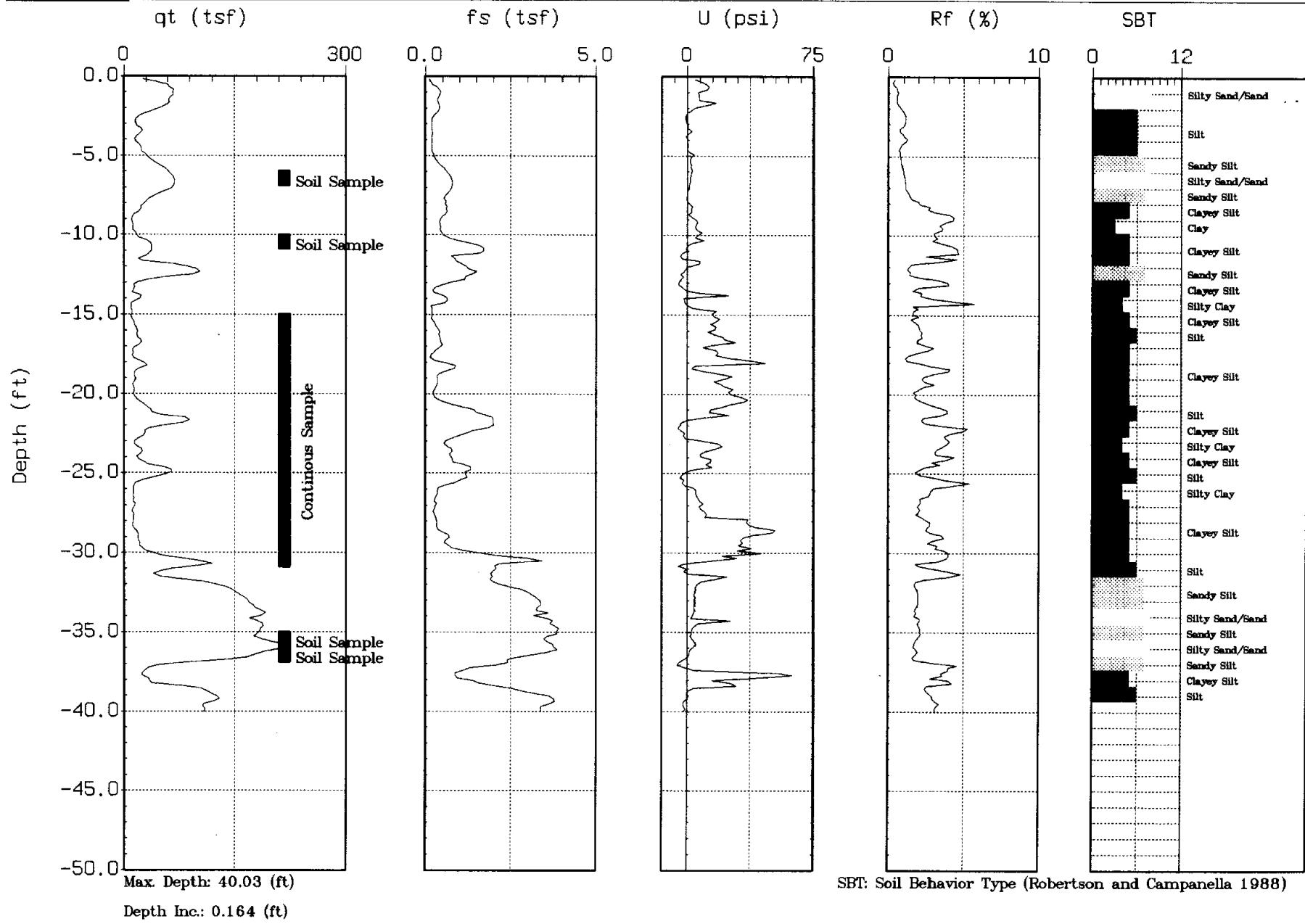
Geologist : G. KRONK  
Date : 09:13:01 08:11



001542



## IT CORPORATION

Site : JERVIS B. WEBB  
Location : CPT-5Geologist : G. KRONK  
Date : 09:13:01 10:47

SBT: Soil Behavior Type (Robertson and Campanella 1988)

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**APPENDIX**  
**B**

91B-2-99

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**APPENDIX B**

**LABORATORY ANALYTICAL REPORTS**



**Centrum  
Analytical  
Laboratories, Inc.**

1401 Research Park Drive, Suite 100, Riverside, CA 92507

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM (COVER PAGE 1)**

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone/Fax: (909) 779-0310/(909) 779-0344

ELAP Certification No./  
Expiration Date 2373/June 2002

Authorized Signature  
Name, Title (print) Robert R. Clark, PhD, Laboratory Director

Signature, Date JRC 9/20/01

Client Name IT Corporation

Project No: Jervis B. Webb of California

Date(s) Sampled: (from - to) 09/13/01

Date(s) Received: (from - to) 09/13/01

Date(s) Reported: (from - to) 09/13/01

Chain of Custody received: Yes X No \_\_\_\_\_

Comments \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(RWQCB Lab Form: Ver 6/00)



Centrum  
Analytical  
Laboratories, Inc.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM (COVER PAGE 2)**

Organic Analyses                    # of Samples                    # of Samples Subcontracted

8260B                                    20                                    0

Sample Condition:                      Intact

Inorganic Analyses                    # of Samples                    # of Samples Subcontracted

Sample Condition:

Microbiological Analyses            # of Samples                    # of Samples Subcontracted

Sample Condition:

Other Types of Analyses            # of Samples                    # of Samples Subcontracted

Sample Condition:



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

## ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

	DATE ANALYZED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	DATE EXTRACTED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	LAB SAMPLE I.D.	Blank	M4-291-01	M4-291-02	M4-291-03	M4-291-04
	CLIENT SAMPLE I.D.	NA	CB-2@6-7'	CB-2@9-10'	CB-2@15-16'	CB-2-@20'
	EXTRACTION SOLVENT	NA	NA	NA	NA	NA
	EXTRACTION METHOD	5035	5035	5035	5035	5035
	DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL					
Acetone	0.050	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND

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**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	Blank	CB-2@6-7'	CB-2@9-10'	CB-2@15-16'	CB-2@20'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	ND	ND	0.002	ND	0.002
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	ND	ND	0.001	ND	0.002
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	99	99	102	101
Toluene-d8	50	70-130	100	99	97	100
Bromofluorobenzene	50	70-130	102	99	98	100



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

## ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

	DATE ANALYZED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	DATE EXTRACTED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	LAB SAMPLE I.D.	M4-291-05	M4-291-06	M4-291-07	M4-291-08	M4-291-09
	CLIENT SAMPLE I.D.	CB-2@25'	CB-2@30'	CB-2@35'	CB-2@40'	CB-5@6'
	EXTRACTION SOLVENT	NA	NA	NA	NA	NA
	EXTRACTION METHOD	5035	5035	5035	5035	5035
	DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL					
Acetone	0.050	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND	ND
Bromochloromethane	0.001	ND	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	0.004	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND

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**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	CB-2@25°	CB-2@30°	CB-2@35°	CB-2@40°	CB-5@6°
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	<b>0.008</b>	<b>0.005</b>	ND	ND	ND
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	<b>0.029</b>	<b>0.021</b>	ND	<b>3.1</b>	ND
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m-,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	100	99	98	89
Toluene-d8	50	70-130	100	99	99	100
Bromofluorobenzene	50	70-130	99	99	97	98



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

## ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

DATE ANALYZED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
DATE EXTRACTED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
LAB SAMPLE I.D.	M4-291-10	M4-291-11	M4-291-12	M4-291-13	M4-291-14
CLIENT SAMPLE I.D.	CB-5@10'	CB-5@15'	CB-5@20'	CB-5@25'	CB-5@30'
EXTRACTION SOLVENT	NA	NA	NA	NA	NA
EXTRACTION METHOD	5035	5035	5035	5035	5035
DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL				
Acetone	0.050	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND
Bromochloromethane	0.001	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND

**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	CB-5@10'	CB-5@15'	CB-5@20'	CB-5@25'	CB-5@30'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	<b>0.006</b>	<b>0.006</b>	<b>0.007</b>	<b>0.003</b>	<b>0.013</b>
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	<b>0.001</b>	<b>0.002</b>	<b>0.005</b>	<b>0.001</b>	<b>0.012</b>
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	99	98	97	99
Toluene-d8	50	70-130	99	100	101	100
Bromofluorobenzene	50	70-130	98	98	100	98



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

## ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

	DATE ANALYZED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	DATE EXTRACTED	09/13/01	09/13/01	09/13/01	09/13/01	09/13/01
	LAB SAMPLE I.D.	M4-291-15	M4-291-16	M4-291-17	M4-291-18	M4-291-19
	CLIENT SAMPLE I.D.	CB-1@6'	CB-1@10'	CB-1@20'	CB-1@25'	CB-1@30'
	EXTRACTION SOLVENT	NA	NA	NA	NA	NA
	EXTRACTION METHOD	5035	5035	5035	5035	5035
	DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL					
Acetone	0.050	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND



**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	CB-1@6'	CB-1@10'	CB-1@20'	CB-1@25'	CB-1@30'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	<b>0.014</b>	<b>0.009</b>	<b>0.035</b>	<b>0.039</b>	ND
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	<b>0.005</b>	<b>0.003</b>	<b>0.035</b>	<b>0.067</b>	ND
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	102	98	103	100
Toluene-d8	50	70-130	99	99	100	101
Bromofluorobenzene	50	70-130	96	100	99	100
						119



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

### ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

DATE ANALYZED	09/13-14/01	CRDL				
DATE EXTRACTED	09/13-14/01	CRDL				
LAB SAMPLE I.D.	M4-291-20	CRDL				
CLIENT SAMPLE I.D.	CB-1@35'	CRDL				
EXTRACTION SOLVENT	NA	CRDL				
EXTRACTION METHOD	5035	CRDL				
DILUTION FACTOR	1	CRDL				
COMPOUND	CRDL					
Acetone	0.050	ND				
tert-Amyl Methyl Ether (TAME)	0.005	ND				
Benzene	0.001	ND				
Bromobenzene	0.001	ND				
Bromochloromethane	0.001	ND				
Bromodichloromethane	0.001	ND				
Bromoform	0.001	ND				
Bromomethane	0.001	ND				
tert-Butanol (TBA)	0.020	ND				
2-Butanone (MEK)	0.020	ND				
n-Butylbenzene	0.001	ND				
sec-Butylbenzene	0.001	ND				
tert-Butylbenzene	0.001	ND				
Carbon disulfide	0.010	ND				
Carbon tetrachloride	0.001	ND				
Chlorobenzene	0.001	ND				
Chloroethane	0.001	ND				
Chloroform	0.001	ND				
Chloromethane	0.001	ND				
2-Chlorotoluene	0.001	ND				
4-Chlorotoluene	0.001	ND				
Dibromochloromethane	0.001	ND				
1,2-Dibromoethane	0.001	ND				
1,2-Dibromo-3-chloropropane	0.010	ND				
Dibromomethane	0.001	ND				
1,2-Dichlorobenzene	0.001	ND				
1,3-Dichlorobenzene	0.001	ND				
1,4-Dichlorobenzene	0.001	ND				
Dichlorodifluoromethane	0.001	ND				
1,1-Dichloroethane	0.001	<b>0.004</b>				
1,2-Dichloroethane	0.001	ND				
1,1-Dichloroethene	0.001	<b>0.006</b>				
cis-1,2-Dichloroethene	0.001	<b>0.007</b>				
trans-1,2-Dichloroethene	0.001	<b>0.001</b>				



**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	CB-1@35°				
1,2-Dichloropropane	0.001	ND				
1,3-Dichloropropane	0.001	ND				
2,2-Dichloropropane	0.001	ND				
1,1-Dichloropropene	0.001	ND				
cis-1,3-Dichloropropene	0.001	ND				
trans-1,3-Dichloropropene	0.001	ND				
Diisopropyl Ether (DIPE)	0.005	ND				
Ethylbenzene	0.001	ND				
Ethyl tert-Butyl Ether (EtBE)	0.005	ND				
Hexachlorobutadiene	0.001	ND				
2-Hexanone	0.010	ND				
Isopropylbenzene	0.001	ND				
p-Isopropyltoluene	0.001	ND				
Methylene chloride	0.050	ND				
4-Methyl-2-pentanone	0.020	ND				
Methyl-tert-butyl ether (MtBE)	0.005	ND				
Naphthalene	0.002	ND				
n-Propylbenzene	0.001	ND				
Styrene	0.001	ND				
1,1,1,2-Tetrachloroethane	0.001	ND				
1,1,2,2-Tetrachloroethane	0.002	ND				
Tetrachloroethene	0.001	0.017				
Toluene	0.001	ND				
1,2,3-Trichlorobenzene	0.001	ND				
1,2,4-Trichlorobenzene	0.001	ND				
1,1,1-Trichloroethane	0.001	ND				
1,1,2-Trichloroethane	0.001	ND				
Trichloroethene	0.001	2.5				
1,2,3-Trichloropropane	0.001	ND				
Trichlorofluoromethane	0.001	ND				
Trichlorotrifluoroethane	0.005	ND				
1,2,4-Trimethylbenzene	0.001	ND				
1,3,5-Trimethylbenzene	0.001	ND				
Vinyl chloride	0.001	ND				
Xylenes, m-,p-	0.002	0.003				
Xylene, o-	0.001	0.001				
SURROGATE	SPK CONC	ACP%	%RC			
Dibromofluoromethane	50	70-130	96			
Toluene-d8	50	70-130	101			
Bromofluorobenzene	50	70-130	99			



Centrum  
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(RWQCB labFrom 10A; Ver6/00)

Project No: Jervis B. Webb of California

**QA/QC REPORT (Continued)**

**I. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)**

DATE PERFORMED: 09/13/01 ANALYTICAL METHOD: 8260B

BATCH #: M48260S504

LAB SAMPLE I.D.: Laboratory Control Sample UNIT: (Circle one) mg/Kg µg/Kg

ANALYTE	SAMPLE RESULT	SPK CONC	MS	% MS	SPIKE CONC (DUP)	MSD	% MSD	RPD	MS/MSD LIMIT	RPD Limit
8260 Compounds										
1,1-Dichloroethylene	0	0.050	0.054	108%	0.050	0.052	104%	4.1%	59-172	22
Benzene	0	0.050	0.053	106%	0.050	0.052	104%	2.2%	66-142	21
Trichloroethene	0	0.050	0.055	110%	0.050	0.053	106%	4.2%	62-137	24
Toluene	0	0.050	0.054	107%	0.050	0.052	104%	2.8%	59-139	21
Chlorobenzene	0	0.050	0.053	107%	0.050	0.052	104%	2.5%	60-133	21

**I. Laboratory Quality Control Check Sample (LCS)**

DATE PERFORMED: 09/13/01 ANALYTICAL METHOD: 8260B

STANDARD SUPPLY SOURCE: Ultra Sci., Fisher DATE OF SOURCE: 08/23/01

INSTRUMENT I.D.: MEL4 GCMS#1 LOT NUMBER: R-1317, M-106Z, DWM-584, 3354

LAB LCS I.D.: M4-50-3,51-2 UNIT: (Circle one) mg/Kg µg/Kg

ANALYTE	SPIKE CONC	RESULT	% RECOVERY	ACP % REC LIMIT
8260 Compounds				
1,1-Dichloroethylene	0.050	0.054	108%	59-172
Benzene	0.050	0.053	106%	66-142
Trichloroethene	0.050	0.055	110%	62-137
Toluene	0.050	0.054	108%	59-139
Chlorobenzene	0.050	0.053	106%	60-133



**Centrum  
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## Chain of Custody Record

Centrum Job # *MY-291*

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Page 1 of 2

Project No:		Project Name:		<b>Please Circle Analyses Requested</b>					Turn-Around Time								
		<i>Reliable Steel</i>							Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8015M: BTEX/MBE Only	416.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: MBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8260B*, 8021B, 624, 524.2	Metals: Title 22 (CAMS), RCRA, PP	pH, TDS, TSS, Conductivity
Project Manager:		Phone: <i>GARY Gronk</i> 949-261-6441 474-8509											<input type="checkbox"/> 48 Hr. RUSH*				
Client Name: (Report and Billing)		Address: (Report and Billing)												<input checked="" type="checkbox"/> Normal TAT			
<i>IT Corporation</i>		<i>3347 Michelson Dr. Ste 200</i>												* Requires PRIOR approval, additional charges apply			
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MBE Only	416.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: MBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	Metals: Title 22 (CAMS), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex C°	Requested due date: _____
1	<i>CB-2@6-7'</i>	<i>9/3/1</i>	<i>8:00</i>	<i>Soil</i>	<i>3 Enviro</i>	<i>3 Enviro</i>	X	X	X	X	X	X	X	X	X	Remarks/Special Instructions	
2	<i>CB-2@9-10'</i>	<i>9:00</i>			<i>x street</i>	<i>x street</i>	X	X	X	X	X	X	X	X	X		
3	<i>CB-2@15-16'</i>	<i>9:10</i>					X	X	X	X	X	X	X	X	X		
4	<i>CB-2@20'</i>	<i>9:30</i>					X	X	X	X	X	X	X	X	X		
5	<i>CB-2@25'</i>						X	X	X	X	X	X	X	X	X		
6	<i>CB-2@30'</i>						X	X	X	X	X	X	X	X	X		
7	<i>CB-2@35'</i>		<i>10:10</i>				X	X	X	X	X	X	X	X	X		
8	<i>CB-2@40'</i>		<i>10:20</i>				X	X	X	X	X	X	X	X	X		
9	<i>CB-5@6'</i>		<i>11:12</i>				X	X	X	X	X	X	X	X	X		
10	<i>CB-5@10'</i>		<i>11:20</i>				X	X	X	X	X	X	X	X	X		
1) Relinquished by: (Sampler's Signature)			Date: <i>9/13/01</i>	Time: <i>17:00</i>	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:					Sample Disposal			
<i>X Gary Harvey</i>									Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> From Field					<input type="checkbox"/> Client will pick up			
2) Received by:			Date: <i>9/13/1</i>	Time:	4) Received by:		Date:	Time:	Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					<input type="checkbox"/> Return to client			
<i>Morfeld</i>									All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No					<input type="checkbox"/> Lab disposal			
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.			5) Relinquished by:		6) Received for Laboratory by:		Date:	Time:									
Laboratory Notes: <i>LARWQCB - Formnt</i>														Sample Locator No.			



**Centrum  
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## Chain of Custody Record

Centrum Job # 114-291

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Page 2 of 2

Project No:		Project Name:		<i>Reliable Steel</i>				Please Circle Analyses Requested						Turn-Around Time		
								Phone:	Fax:	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MBBE Only	418.1 (TRPH), 413.2, 1684			GC or GCMS Volatiles by 5035*
Project Manager:		Phone:														
<i>GARY CROOK</i>		949-261-6441														
Client Name: (Report and Billing)		Address: (Report and Billing)		<i>3347 M-Helson Dr. Ste 200 Irvine CA 92612</i>												
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location		Containers: # and type									Requested due date: _____
11	CB-5C 15'	9/13/1	1125	Soil			3 Enclosed									Remarks/Special Instructions
12	CB-5C 20'		1140													
13	CB-5C 25'						+1 steel screen									
14	CB-5C 30'						6									
15	CB-1C 6'															
16	CB-1C 10'															
17	CB-1C 20'						+1 steel screen									
18	CB-1C 25'															
19	CB-1C 30'															
20	CB-1C 35'															
1) Relinquished by: (Sampler's Signature)				Date:	Time:	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:						Sample Disposal
<i>X Gary Crook</i>				9/13/1	0905					Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> From Field						<input type="checkbox"/> Client will pick up
2) Received by:				Date:	Time:	4) Received by:		Date:	Time:	Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						<input type="checkbox"/> Return to client
<i>Walt</i>				9/13/1						All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No						<input type="checkbox"/> Lab disposal
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.				5) Relinquished by:		6) Received for Laboratory by:		Date:	Time:	<input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> Hand carried						
Laboratory Notes:  <i>LA RWQCB</i>														Sample Locator No.		



**Centrum  
Analytical  
Laboratories, Inc.**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM (COVER PAGE 1)**

Laboratory Name: Centrum Analytical Laboratories, Inc.

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone/Fax: (909) 779-0310/(909) 779-0344

ELAP Certification No./  
Expiration Date 2373/June 2002

Authorized Signature  
Name, Title (print) Robert P. Clark, PhD, Laboratory Director

Signature, Date R.P. Clark 9/10/01

Client Name IT Corporation

Project No: Jervis B. Webb of California

Date(s) Sampled: (from - to) 09/14/01

Date(s) Received: (from - to) 09/14/01

Date(s) Reported: (from - to) 09/14/01

Chain of Custody received: Yes X No \_\_\_\_\_

Comments \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

(RWQCB Lab Form: Ver 6/00)



**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM (COVER PAGE 2)**

<u>Organic Analyses</u>	# of Samples	# of Samples Subcontracted
8260B	14	0
Sample Condition:	Intact	

<u>Inorganic Analyses</u>	# of Samples	# of Samples Subcontracted
Sample Condition:		

<u>Microbiological Analyses</u>	# of Samples	# of Samples Subcontracted
Sample Condition:		

<u>Other Types of Analyses</u>	# of Samples	# of Samples Subcontracted
Sample Condition:		



Centrum  
Analytical  
Laboratories, Inc.

Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

DATE ANALYZED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
DATE EXTRACTED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
LAB SAMPLE I.D.	Blank	M4-292-01	M4-292-02	M4-292-03	M4-292-04
CLIENT SAMPLE I.D.	NA	CB-4@6'	CB-4@10'	CB-4@15'	CB-4@20'
EXTRACTION SOLVENT	NA	NA	NA	NA	NA
EXTRACTION METHOD	5035	5035	5035	5035	5035
DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL				
Acetone	0.050	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND
Bromochloromethane	0.001	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND

**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	Blank	CB-4@6'	CB-4@10'	CB-4@15'	CB-4@20'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (Dipe)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	ND	<b>0.002</b>	ND	<b>0.003</b>	<b>0.001</b>
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	ND	ND	<b>0.001</b>	<b>0.001</b>	<b>0.004</b>
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m-,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	98	99	98	98
Toluene-d8	50	70-130	99	99	100	100
Bromofluorobenzene	50	70-130	103	97	99	98
						101



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

## ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

	DATE ANALYZED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
	DATE EXTRACTED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
	LAB SAMPLE I.D.	M4-292-05	M4-292-06	M4-292-07	M4-292-08	M4-292-09
	CLIENT SAMPLE I.D.	CB-4@25'	CB-4@30'	CB-4@35'	CB-3@6'	CB-3@10'
	EXTRACTION SOLVENT	NA	NA	NA	NA	NA
	EXTRACTION METHOD	5035	5035	5035	5035	5035
	DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL					
Acetone	0.050	ND	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND	ND
Bromochloromethane	0.001	ND	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	0.002	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	0.005	ND	ND	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND	ND

001565



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ANALYTICAL TEST RESULT (Cont'd)

COMPOUND	CRDL	CB-4@25'	CB-4@30'	CB-4@35'	CB-3@6'	CB-3@10'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	0.012	0.034	ND	0.002	0.005
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	0.093	0.63	0.005	ND	0.008
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m-p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	100	98	98	86
Toluene-d8	50	70-130	97	101	100	97
Bromofluorobenzene	50	70-130	100	98	101	95



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Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

ANALYTICAL RESULT FOR ORGANICS

METHOD: 8260B

REPORTING UNIT: mg/Kg

DATE ANALYZED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
DATE EXTRACTED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01
LAB SAMPLE I.D.	M4-292-10	M4-292-11	M4-292-12	M4-292-13	M4-292-14
CLIENT SAMPLE I.D.	CB-3@15'	CB-3@20'	CB-3@25'	CB-3@30'	CB-3@35'
EXTRACTION SOLVENT	NA	NA	NA	NA	NA
EXTRACTION METHOD	5035	5035	5035	5035	5035
DILUTION FACTOR	1	1	1	1	1
COMPOUND	CRDL				
Acetone	0.050	ND	ND	ND	ND
tert-Amyl Methyl Ether (TAME)	0.005	ND	ND	ND	ND
Benzene	0.001	ND	ND	ND	ND
Bromobenzene	0.001	ND	ND	ND	ND
Bromochloromethane	0.001	ND	ND	ND	ND
Bromodichloromethane	0.001	ND	ND	ND	ND
Bromoform	0.001	ND	ND	ND	ND
Bromomethane	0.001	ND	ND	ND	ND
tert-Butanol (TBA)	0.020	ND	ND	ND	ND
2-Butanone (MEK)	0.020	ND	ND	ND	ND
n-Butylbenzene	0.001	ND	ND	ND	ND
sec-Butylbenzene	0.001	ND	ND	ND	ND
tert-Butylbenzene	0.001	ND	ND	ND	ND
Carbon disulfide	0.010	ND	ND	ND	ND
Carbon tetrachloride	0.001	ND	ND	ND	ND
Chlorobenzene	0.001	ND	ND	ND	ND
Chloroethane	0.001	ND	ND	ND	ND
Chloroform	0.001	ND	ND	ND	ND
Chloromethane	0.001	ND	ND	ND	ND
2-Chlorotoluene	0.001	ND	ND	ND	ND
4-Chlorotoluene	0.001	ND	ND	ND	ND
Dibromochloromethane	0.001	ND	ND	ND	ND
1,2-Dibromoethane	0.001	ND	ND	ND	ND
1,2-Dibromo-3-chloropropane	0.010	ND	ND	ND	ND
Dibromomethane	0.001	ND	ND	ND	ND
1,2-Dichlorobenzene	0.001	ND	ND	ND	ND
1,3-Dichlorobenzene	0.001	ND	ND	ND	ND
1,4-Dichlorobenzene	0.001	ND	ND	ND	ND
Dichlorodifluoromethane	0.001	ND	ND	ND	ND
1,1-Dichloroethane	0.001	ND	ND	ND	ND
1,2-Dichloroethane	0.001	ND	ND	ND	ND
1,1-Dichloroethene	0.001	ND	ND	0.004	ND
cis-1,2-Dichloroethene	0.001	ND	ND	ND	ND
trans-1,2-Dichloroethene	0.001	ND	ND	ND	ND

**ANALYTICAL TEST RESULT (Cont'd)**

COMPOUND	CRDL	CB-3@15'	CB-3@20'	CB-3@25'	CB-3@30'	CB-3@35'
1,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,3-Dichloropropane	0.001	ND	ND	ND	ND	ND
2,2-Dichloropropane	0.001	ND	ND	ND	ND	ND
1,1-Dichloropropene	0.001	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.001	ND	ND	ND	ND	ND
Diisopropyl Ether (DIPE)	0.005	ND	ND	ND	ND	ND
Ethylbenzene	0.001	ND	ND	ND	ND	ND
Ethyl tert-Butyl Ether (EtBE)	0.005	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.001	ND	ND	ND	ND	ND
2-Hexanone	0.010	ND	ND	ND	ND	ND
Isopropylbenzene	0.001	ND	ND	ND	ND	ND
p-Isopropyltoluene	0.001	ND	ND	ND	ND	ND
Methylene chloride	0.050	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	0.020	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MtBE)	0.005	ND	ND	ND	ND	ND
Naphthalene	0.002	ND	ND	ND	ND	ND
n-Propylbenzene	0.001	ND	ND	ND	ND	ND
Styrene	0.001	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethane	0.001	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.002	ND	ND	ND	ND	ND
Tetrachloroethene	0.001	<b>0.011</b>	<b>0.009</b>	<b>0.062</b>	<b>0.001</b>	ND
Toluene	0.001	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	0.001	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	0.001	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	0.001	ND	ND	ND	ND	ND
Trichloroethene	0.001	<b>0.021</b>	<b>0.029</b>	<b>0.29</b>	<b>0.024</b>	<b>0.001</b>
1,2,3-Trichloropropane	0.001	ND	ND	ND	ND	ND
Trichlorofluoromethane	0.001	ND	ND	ND	ND	ND
Trichlorotrifluoroethane	0.005	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	0.001	ND	ND	ND	ND	ND
Vinyl chloride	0.001	ND	ND	ND	ND	ND
Xylenes, m-,p-	0.002	ND	ND	ND	ND	ND
Xylene, o-	0.001	ND	ND	ND	ND	ND
SURROGATE	SPK CONC	ACP%	%RC	%RC	%RC	%RC
Dibromofluoromethane	50	70-130	99	104	98	98
Toluene-d8	50	70-130	100	100	100	100
Bromofluorobenzene	50	70-130	100	99	100	100



Project No: Jervis B. Webb of California

(RWQCB labFrom 10A; Ver6/00)

### QA/QC REPORT (Continued)

#### I. Matrix Spike (MS)/Matrix Spike Duplicate (MSD)

DATE PERFORMED: 09/14/01 ANALYTICAL METHOD: 8260B

BATCH #: M48260S505

LAB SAMPLE I.D.: Laboratory Control Sample UNIT: (Circle one) mg/Kg µg/Kg

ANALYTE	SAMPLE RESULT	SPK CONC	MS	% MS	SPIKE CONC (DUP)	MSD	% MSD	RPD	MS/MSD LIMIT	RPD Limit
8260 Compounds										
1,1-Dichloroethylene	0	0.020	0.019	95%	0.020	0.019	95%	0.1%	59-172	22
Benzene	0	0.020	0.020	98%	0.020	0.019	97%	0.9%	66-142	21
Trichloroethene	0	0.020	0.019	97%	0.020	0.020	98%	0.8%	62-137	24
Toluene	0	0.020	0.019	96%	0.020	0.019	96%	0.6%	59-139	21
Chlorobenzene	0	0.020	0.020	100%	0.020	0.020	98%	1.7%	60-133	21

#### I. Laboratory Quality Control Check Sample (LCS)

DATE PERFORMED: 09/14/01 ANALYTICAL METHOD: 8260B

STANDARD SUPPLY SOURCE: Ultra Sci., Fisher DATE OF SOURCE: 08/23/01

INSTRUMENT I.D.: MEL4 GCMS#1 LOT NUMBER: R-1317, M-106Z, DWM-584, 3354

LAB LCS I.D.: M4-50-3,51-2 UNIT: (Circle one) mg/Kg µg/Kg

ANALYTE	SPIKE CONC	RESULT	% RECOVERY	ACP % REC LIMIT
8260 Compounds				
1,1-Dichloroethylene	0.020	0.019	95%	59-172
Benzene	0.020	0.020	98%	66-142
Trichloroethene	0.020	0.019	97%	62-137
Toluene	0.020	0.019	96%	59-139
Chlorobenzene	0.020	0.020	100%	60-133



**Centrum  
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## Chain of Custody Record

Centrum Job # M4-292

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Page 1 of 2

Project No:		Project Name:		Please Circle Analyses Requested														
		Reliable Steel		<input type="checkbox"/> Diesel, Fuel Screen, Carbon Chain <input type="checkbox"/> 8015M: Gas only <input type="checkbox"/> 8021B: BTEX/MTBE Only <input type="checkbox"/> 418.1 (TRPH), 4132, 1664  <input checked="" type="checkbox"/> GC or GCMS Volatiles by 5035* <input checked="" type="checkbox"/> GCMS: 8260B <input checked="" type="checkbox"/> GCMS: NMME Conf. Only, BTEX/Oxygenates Only <input type="checkbox"/> GCMS: 8270C, 625 <input type="checkbox"/> 8080: Pesticides, PCBs, Pest/PCB  <input type="checkbox"/> Metals: Title 22 (CAM), RCRA, PP <input type="checkbox"/> pH, TDS, TSS, Conductivity <input type="checkbox"/> Flashpoint, Hex Cr														
Project Manager:		Phone: GARY (genk) 949.261.6441 474.8309		Turn-Around Time														
Client Name: (Report and Billing)		Address: (Report and Billing)		<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input checked="" type="checkbox"/> Normal TAT														
IT CORPORATION		3347 Michelson Dr Ste 200 Fevine CA 92612		*Requires PRIOR approval, additional charges apply														
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	Requested due date: _____											
1 CB-4e 6'	9/14/1	740	Soil		2x6m x 2		Remarks/Special Instructions											
2 CB-4e 10'		948																
3 CB-4e 15'		752																
4 CB-4e 20'		805																
5 CB-4e 25'					+1st kerf Steel													
6 CB-4e 30'		835																
7 CB-4e 35'		845																
8 CB-3e 6'		915																
9 CB-3e 10'		925																
10 CB-3e 15'		930																
1) Relinquished by: (Sampler's Signature) <i>X) Don J. Harvey</i>				Date: 9/14/1	Time: 11:05	3) Relinquished by:	Date:	Time:	To be completed by Laboratory personnel:									
2) Received by: <i>John H.</i>				Date: 9/14/1	Time:	4) Received by:	Date:	Time:	Samples chilled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> Hand carried									
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.				Sample Disposal														
				<input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal														
Laboratory Notes:																		Sample Locator No.



**Centrum  
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Fax: 562.498.8617

## Chain of Custody Record

Centrum Job # M4-292

Page 2 of 2

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Please Circle Analyses Requested								Turn-Around Time													
Project No:	Project Name: <i>Reliable Steel</i>																				
Project Manager:		Phone:	Fax:						* Requires PRIOR approval, additional charges apply												
<i>GARY CRONC</i>		<i>949.261.6441</i>	<i>477.8309</i>																		
Client Name: (Report and Billing)		Address: (Report and Billing)						Requested due date: _____													
<i>IT Corporation</i>		<i>3347 Michelson Dr 37c200</i>		<i>Fevine CA 92612</i>																	
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	Carbon Chain	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MTBE Only	418.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*	GCMS: 8260B > 8021B, 624, 524.2	GCMS: MTBE Conf. Only, BTEX/Oxygenates Only	GCMS: 8270C, 625	8080: Pesticides, PCBs, Pest/PCB	Metal: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	Remarks/Special Instructions	
11	CB-3C20	9/11/11	935	<i>5 gal</i>		<i>+1 steel drum</i>		X					X								
12	CB-3C25												X								
13	CB-3C30												X								
14	CB-3C35												X								
1) Relinquished by: (Sampler's Signature) <i>David Hall</i>								Date:	9/11/11	Time:	1105	3) Relinquished by:	Date:	Time:	To be completed by Laboratory personnel:				Sample Disposal		
2) Received by: <i>et al</i>								Date:	9/11/11	Time:		4) Received by:	Date:	Time:	Samples chilled? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal		
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.								5) Relinquished by:	Date:	Time:											
								6) Received for Laboratory by:	Date:	Time:											
Laboratory Notes:																Sample Locator No.					



**Centrum  
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Laboratories, Inc.**

CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

Client: IT Corporation  
3347 Michelson Drive, Ste. 200  
Irvine, CA 92612

Date Sampled: 09/13/01  
Date Received: 09/13/01  
Job Number: 19220

Project: Jervis B. Webb of California

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**CASE NARRATIVE**

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The following information applies to samples which were received on 09/13/01 :

This report is an addendum to Centrum Analytical Mobile Laboratory Job #M4-291.  
The results reported herein are for analyses performed in our stationary facility.

Unless otherwise noted below, the Quality Control acceptance criteria were met for all samples  
for every analysis requested. The date of issue for this report is 10/01/01.

Report approved by:

*Tom Wilson*

Tom Wilson  
Laboratory Director

*Rodolfo Vergara, Jr.*

Rodolfo Vergara, Jr.  
Quality Assurance Manager

Riverside Laboratory, ELAP Lab# 2419  
Signal Hill Laboratory, ELAP Lab# 2479

DL : Detection Limit -- The lowest level at which the compound can reliably be detected under normal laboratory conditions.  
ND : Not Detected -- The compound was analyzed for but was not found to be present at or above the detection limit.  
NA : Not Analyzed -- Per client request, this analyte was not on the list of compounds to be analyzed for.

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## **Centrum Analytical Laboratories, Inc.**

# **General Chemistry**

Client: IT Corporation Date Sampled: 09/13/01  
Project: Jervis B. Webb of California Date Received: 09/13/01  
Job No.: 19220  
Matrix: Soil\*  
Analyst: TLR/GF

<b>Analysis:</b>	Hexavalent Chromium
<b>Method Number:</b>	7196
<b>Sample ID</b>	<b>mg/Kg</b>
Blank	ND
CB-2@15-16'	ND
CB-2@20'	ND
CB-2@25'	ND
CB-2@30'	ND
CB-2@35'	ND
CB-2@40'	ND
CB-1@20'	ND
CB-1@25'	ND
CB-1@30'	ND
CB-1@35'	ND
<b>Reporting Limit:</b>	0.02
<b>Date Analyzed:</b>	08/17/01
<b>QC Batch #:</b>	7196S0224

\*Sample were prepared as a 1:1 DI Water leachate.



**Centrum  
Analytical  
Laboratories, Inc.**

## QC Sample Report - General Chemistry

Matrix: Soil

Batch #: 7196S0224

MS/MSD Sample ID: Laboratory Control Sample

### Batch Accuracy Results

Sample ID: Laboratory Control Sample

Analysis	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits % Recovery	Pass/Fail
Hexavalent Chromium	0.5      106	80 - 120		Pass

Analytical Notes:

--

### Batch Precision Results

Analysis	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass/Fail
Hexavalent Chromium	0.528	0.498	6%	20%	Pass

--

MS: Matrix Spike Sample

MSD: Matrix Spike Duplicate



## Metals

Client: IT Corporation Date Sampled: 09/13/01  
Project: Jervis B. Webb of California Date Received: 09/13/01  
Job No: 19220 Date Digested: 09/14/01  
Matrix: Soil Date Analyzed: 09/14/01  
Analyst: TLR/GF Batch Number: 6010S2156  
7000S0496

Element	Method #	RL	Sample ID:	Blank	CB-2@ 15-16'	CB2@ 20'	CB-2@ 25'	CB-2@ 30'	CB-2@ 35'
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Antimony	6010B	2.0	ND	ND	ND	ND	ND	ND	ND
Arsenic	6010B	1.0	ND	2.2	2.1	2.6	2.3	7.9	
Barium	6010B	0.50	ND	100	110	120	130	73	
Beryllium	6010B	0.50	ND	ND	ND	ND	ND	ND	ND
Cadmium	6010B	0.50	ND	ND	ND	ND	0.54	ND	
Chromium	6010B	0.50	ND	16	17	17	17	10	
Cobalt	6010B	0.50	ND	11	11	12	12	7.6	
Copper	6010B	1.0	ND	17	19	17	21	7.7	
Lead	6010B	1.0	ND	3.6	3.3	3.6	3.9	1.5	
Mercury	7471	0.10	ND	ND	ND	ND	0.24	ND	
Molybdenum	6010B	1.0	ND	ND	ND	ND	ND	ND	
Nickel	6010B	1.0	ND	12	12	12	13	6.6	
Selenium	6010B	5.0	ND	ND	ND	ND	ND	ND	
Silver	6010B	2.0	ND	ND	ND	ND	ND	ND	
Thallium	6010B	5.0	ND	ND	ND	ND	ND	ND	
Vanadium	6010B	0.50	ND	36	38	38	40	26	
Zinc	6010B	10	ND	54	54	57	59	36	



## Metals

Client: IT Corporation Date Sampled: 09/13/01  
Project: Jervis B. Webb of California Date Received: 09/13/01  
Job No: 19220 Date Digested: 09/14/01  
Matrix: Soil Date Analyzed: 09/14/01  
Analyst: TLR/GF Batch Number: 6010S2156  
7000S0496

Element	Method #	RL	Sample ID:	CB-2@ 40'	CB-1@ 20'	CB-1@ 25'	CB-1@ 30'	CB-1@ 35'
				mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Antimony	6010B	2.0	ND	ND	ND	ND	ND	ND
Arsenic	6010B	1.0	2.3	3.5	2.5	6.1	2.2	
Barium	6010B	0.50	97	130	170	52	61	
Beryllium	6010B	0.50	ND	0.54	0.57	ND	ND	
Cadmium	6010B	0.50	ND	0.54	0.60	ND	ND	
Chromium	6010B	0.50	21	20	19	7.1	11	
Cobalt	6010B	0.50	11	14	14	5.6	7.7	
Copper	6010B	1.0	16	20	25	6.2	9.8	
Lead	6010B	1.0	2.5	4.4	5.3	1.2	1.4	
Mercury	7471	0.10	0.28	0.11	ND	2.5	ND	
Molybdenum	6010B	1.0	ND	ND	ND	ND	ND	
Nickel	6010B	1.0	11	15	16	5.2	8.0	
Selenium	6010B	5.0	ND	ND	ND	ND	ND	
Silver	6010B	2.0	ND	ND	ND	ND	ND	
Thallium	6010B	5.0	ND	ND	ND	ND	ND	
Vanadium	6010B	0.50	38	44	50	19	25	
Zinc	6010B	10	51	73	66	27	38	



## QC Sample Report - Metals

Sample Matrix: Soil  
Analytical Batch #: 6010S2156, 7000S0496  
MS/MSD Sample ID: CB1@35', CB1@35'

Metal	Batch Precision Results:					Batch Accuracy Results:			
	Spike Sample Recovery mg/Kg	Spike Duplicate Recovery mg/Kg	Relative Percent Difference (RPD)	Upper Control Limit RPD	Pass / Fail	Spike Concentration mg/Kg	% Recovery LCS	Acceptance Limits	Percent Recovery Pass / Fail
Antimony	40.1	40.4	1%	20%	Pass	50	101	75 - 125	Pass
Arsenic	47.3	46.8	1%	20%	Pass	50	102	75 - 125	Pass
Barium	106	119	11%	20%	Pass	50	104	75 - 125	Pass
Beryllium	41.7	41.5	0%	20%	Pass	50	99	75 - 125	Pass
Cadmium	41.5	41.9	1%	20%	Pass	50	104	75 - 125	Pass
Chromium	52.7	53.5	1%	20%	Pass	50	101	75 - 125	Pass
Cobalt	49.7	50.4	1%	20%	Pass	50	99	75 - 125	Pass
Copper	54.0	55.8	3%	20%	Pass	50	102	75 - 125	Pass
Lead	44.2	44.3	0%	20%	Pass	50	102	75 - 125	Pass
Mercury	3.04	3.01	1%	20%	Pass	2.5	113	75 - 125	Pass
Molybdenum	42.9	42.6	1%	20%	Pass	50	102	75 - 125	Pass
Nickel	49.8	50.6	2%	20%	Pass	50	106	75 - 125	Pass
Selenium	41.3	40.7	1%	20%	Pass	50	102	75 - 125	Pass
Silver	50.6	49.7	2%	20%	Pass	50	114	75 - 125	Pass
Thallium	44.6	43.4	3%	20%	Pass	50	104	75 - 125	Pass
Vanadium	67.6	71.2	5%	20%	Pass	50	104	75 - 125	Pass
Zinc	82.2	85.8	4%	20%	Pass	50	109	75 - 125	Pass

### Analytical Notes

LCS: Laboratory Control Sample

MS: Matrix Spike

RPD: Relative Percent Difference

LCSD: Laboratory Control Sample Duplicate

MSD: Matrix Spike Duplicate



CERTIFIED HAZARDOUS WASTE TESTING MOBILE & IN HOUSE LABORATORIES

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION**

**LABORATORY REPORT FORM FOR METALS**

Laboratory Name: Centrum Analytical Laboratories

Address: 1401 Research Park Drive, Suite 100, Riverside, CA 92507

Telephone: (909) 779-0310

Laboratory Certification  
(ELAP) No: 2419 Expiration Date: May 31, 2002

Laboratory Director's Name (Print): Tom Wilson

Laboratory Director's Signature: Tom Wilson

Client: IT Corporation

Project Name: Reliable Steel

Date Sampled: 09/13/01

Date Received: 09/13/01

Date Reported: 09/14/01

Chain of Custody Received: Yes X No       

Sample Preservatives: N/A

Sample Condition:

--Sample Container Material: Glass        Brass Tube X Plastic

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#### ANALYTICAL RESULTS FOR METALS

DATE ANALYZED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01	
LAB SAMPLE ID	Blank	19220-3	19220-4	19220-5	19220-6	
CLIENT SAMPLE ID	Blank	CB-2@15-16'	CB-2@20'	CB-2@25'	CB-2@30'	
DILUTION FACTOR	50	50	50	50	50	
TYPE: TTLC/STLC/TM/DM	TTLC	TTLC	TTLC	TTLC	TTLC	
SAMPLE MATRIX	Soil	Soil	Soil	Soil	Soil	
REPORTING UNIT: mg/kg mg/L	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
METAL	METHOD	DL	RESULTS			
Antimony	6010B	2.0	ND	ND	ND	ND
Arsenic	6010B	1.0	ND	2.2	2.1	2.6
Barium	6010B	0.50	ND	100	110	120
Beryllium	6010B	0.50	ND	ND	ND	ND
Cadmium	6010B	0.50	ND	ND	ND	0.54
Chromium	6010B	0.50	ND	16	17	17
Cobalt	6010B	0.50	ND	11	11	12
Copper	6010B	1.0	ND	17	19	17
Lead	6010B	1.0	ND	3.6	3.3	3.6
Mercury	7471	0.10	ND	ND	ND	0.24
Molybdenum	6010B	1.0	ND	ND	ND	ND
Nickel	6010B	1.0	ND	12	12	12
Selenium	6010B	5.0	ND	ND	ND	ND
Silver	6010B	2.0	ND	ND	ND	ND
Thallium	6010B	5.0	ND	ND	ND	ND
Vanadium	6010B	0.50	ND	36	38	38
Zinc	6010B	10	ND	54	54	57

TTLC=Total Threshold Limit Concentration (Wet Weight); STLC=Soluble Threshold Limit Concentration; TM=Total Metals; DM=Dissolved Metals (Filtered Before Adding Preservative); DL=Detection Limit; ND=Not Detected



#### ANALYTICAL RESULTS FOR METALS

DATE ANALYZED	09/14/01	09/14/01	09/14/01	09/14/01	09/14/01	
LAB SAMPLE ID	19220-7	19220-8	19220-17	19220-18	19220-19	
CLIENT SAMPLE ID	CB-2@35'	CB-2@40'	CB-1@20'	CB-1@25'	CB-1@30'	
DILUTION FACTOR	50	50	50	50	50	
TYPE: TTLC/STLC/TM/DM	TTLC	TTLC	TTLC	TTLC	TTLC	
SAMPLE MATRIX	Soil	Soil	Soil	Soil	Soil	
REPORTING UNIT: mg/kg mg/L	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
METAL	METHOD	DL	RESULTS			
Antimony	6010B	2.0	ND	ND	ND	ND
Arsenic	6010B	1.0	7.9	2.3	3.5	2.5
Barium	6010B	0.50	73	97	130	170
Beryllium	6010B	0.50	ND	ND	0.54	0.57
Cadmium	6010B	0.50	ND	ND	0.54	0.60
Chromium	6010B	0.50	10	21	20	19
Cobalt	6010B	0.50	7.6	11	14	14
Copper	6010B	1.0	7.7	16	20	25
Lead	6010B	1.0	1.5	2.5	4.4	5.3
Mercury	7471	0.10	ND	0.28	0.11	ND
Molybdenum	6010B	1.0	ND	ND	ND	ND
Nickel	6010B	1.0	6.6	11	15	16
Selenium	6010B	5.0	ND	ND	ND	ND
Silver	6010B	2.0	ND	ND	ND	ND
Thallium	6010B	5.0	ND	ND	ND	ND
Vanadium	6010B	0.50	26	38	44	50
Zinc	6010B	10	36	51	73	66
						27

TTLC=Total Threshold Limit Concentration (Wet Weight); STLC=Soluble Threshold Limit Concentration; TM=Total Metals; DM=Dissolved Metals (Filtered Before Adding Preservative); DL=Detection Limit; ND=Not Detected



#### ANALYTICAL RESULTS FOR METALS

DATE ANALYZED	09/14/01		
LAB SAMPLE ID	19220-20		
CLIENT SAMPLE ID	CB-1 @ 35'		
DILUTION FACTOR	50		
TYPE: TTLC/STLC/TM/DM	TTLC		
SAMPLE MATRIX	Soil		
REPORTING UNIT: mg/kg mg/L	mg/Kg		
METAL	METHOD	DL	RESULTS
Antimony	6010B	2.0	ND
Arsenic	6010B	1.0	2.2
Barium	6010B	0.50	61
Beryllium	6010B	0.50	ND
Cadmium	6010B	0.50	ND
Chromium	6010B	0.50	11
Cobalt	6010B	0.50	7.7
Copper	6010B	1.0	9.8
Lead	6010B	1.0	1.4
Mercury	7471	0.10	ND
Molybdenum	6010B	1.0	ND
Nickel	6010B	1.0	8.0
Selenium	6010B	5.0	ND
Silver	6010B	2.0	ND
Thallium	6010B	5.0	ND
Vanadium	6010B	0.50	25
Zinc	6010B	10	38

TTLC=Total Threshold Limit Concentration (Wet Weight); STLC=Soluble Threshold Limit Concentration; TM=Total Metals; DM=Dissolved Metals (Filtered Before Adding Preservative); DL=Detection Limit; ND=Not Detected

**II. Calibration, Matrix Spike, and Laboratory Control Spike**

DATE ANALYZED: **09/14/01**

LAB SAMPLE ID: Laboratory Control Sample

REPORTING UNIT: mg/Kg

Metal	Calibration Range	Spike Amount	MS % Rec	MSD % Rec	MS Limits	RPD	RPD Limits	LCS % Rec	LCS Limits
Antimony	2.0-250	50	101	107	70-125	6%	20	101	80-120
Arsenic	1.0-250	50	102	106	70-125	4%	20	102	80-120
Barium	0.50-250	50	104	105	70-125	1%	20	104	80-120
Beryllium	0.50-125	50	99	101	70-125	2%	20	99	80-120
Cadmium	0.50-50	50	104	104	70-125	0%	20	104	80-120
Chromium	0.50-250	50	101	102	70-125	1%	20	101	80-120
Cobalt	0.50-250	50	99	104	70-125	5%	20	99	80-120
Copper	0.50-250	50	102	102	70-125	0%	20	102	80-120
Lead	1.0-250	50	102	106	70-125	4%	20	102	80-120
Mercury	0.10-5.0	2.5	113	109	70-125	4%	20	113	80-120
Molybdenum	1.0-250	50	102	107	70-125	5%	20	102	80-120
Nickel	1.0-250	50	106	106	70-125	0%	20	106	80-120
Selenium	5.0-50	50	102	106	70-125	4%	20	102	80-120
Silver	2.0-250	50	114	112	70-125	2%	20	114	80-120
Thallium	5.0-250	50	104	109	70-125	5%	20	104	80-120
Vanadium	0.50-250	50	104	104	70-125	0%	20	104	80-120
Zinc	10-250	50	109	108	70-125	1%	20	109	80-120

MS=Matrix Spike; MSD=Matrix Spike Duplicate; % Rec=Percent Recovery; RPD=Relative Percent Difference

LCS=Laboratory Control Spike; NA=Not Analyzed



**III. Inductively Coupled Plasma (ICP) Interference Check Sample**  
**(As specified in EPA methods 200.7/6010)**

**REPORTING UNIT: mg/L**

Metal	Date Analyzed	True Conc	Initial Run		Final Run		% Rec Limits
			Result	% Rec	Result	% Rec	
Aluminum	09/14/01	500	484	97	492	98	80-120
Iron	09/14/01	200	194	96	213	106	80-120
Barium	09/14/01	1.0	1.03	103	1.06	106	80-120
Beryllium	09/14/01	1.0	0.91	91	0.94	94	80-120
Cadmium	09/14/01	1.0	0.91	91	0.94	94	80-120
Chromium	09/14/01	1.0	0.93	93	0.92	92	80-120
Cobalt	09/14/01	1.0	0.96	96	0.97	97	80-120
Copper	09/14/01	1.0	1.00	100	1.00	100	80-120
Lead	09/14/01	1.0	0.90	90	0.94	94	80-120
Manganese	09/14/01	1.0	0.95	95	0.98	98	80-120
Nickel	09/14/01	1.0	0.90	90	0.93	93	80-120
Silver	09/14/01	1.0	1.25	125*	1.23	123*	80-120
Vanadium	09/14/01	1.0	0.96	96	0.97	97	80-120
Zinc	09/14/01	1.0	1.02	102	1.04	104	80-120

Conc=Concentration; % Rec=Percent Recovery

\* No hits reported for this analyte. Since ICS recovery was out high, data not affected.



Centrum  
Analytical  
Laboratories, Inc.

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Fax: 909.779.0344

3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617

Chain of Custody Record

IN-HOUSE Job # 19220

Centrum # M4-291

www.centrum-labs.com

lab@centrum-labs.com

Page 1 of 2

Project No:		Project Name:		Please Circle Analyses Requested															
Project Manager: Cronk Gary Conte		Phone: 949-261-6441 Fax: 471-8509		<input type="checkbox"/> Diesel/ Fuel Screen, Carbon Chain <input type="checkbox"/> 8015M: Gas Only <input type="checkbox"/> 8015M: BTEX/MAPC Only <input checked="" type="checkbox"/> 410.1 (TRPH), 413.2, 1345  <input checked="" type="checkbox"/> GC or GCMS Volatiles by 5035* <input checked="" type="checkbox"/> GCMS: 8200B, 821B, 824, 824.2 <input type="checkbox"/> GCNS: MBRE Conf. Only, BTEX/DB, Analyses Only <input type="checkbox"/> GCMS: 8270C, 825 <input type="checkbox"/> 8000: Pesticides, PCBs, Polychlorinated  <input checked="" type="checkbox"/> Metals: Total 22 (ICP), RCRA, PP <input checked="" type="checkbox"/> pH, TDS, TSS, Conductivity <input checked="" type="checkbox"/> Flashpoint, Ignitability 															
Client Name: (Report and Billing)		Address: (Report and Billing)		Turn-Around Time															
IT Corporation		3347 Michelson Dr. Ste 200 Irvine CA 92612		<input type="checkbox"/> 24 Hr. RUSH* <input type="checkbox"/> 48 Hr. RUSH* <input checked="" type="checkbox"/> Normal TAT															
Centrum ID (Lab use only)		Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	Requested due date: _____											
1	CB-2C6-7'	9/13/1	8:00	Soil		3 Enviro													
2	CB-2C9-10'		9:00			x street Soil													
3	CB-2C15-16'		9:10																
4	CB-2C20'		9:30																
5	CB-2C25'																		
6	CB-2C30'																		
7	CB-2C35'		10:10																
8	CB-2C40'		10:20																
9	CB-5C6'		11:12																
10	CB-5C10'		11:20																
1) Relinquished by: (Sampler's Signature)		Date:	Time:	3) Relinquished by:		Date:	Time:	Remarks/Special Instructions											
2) Received by:		Date: 9/13/1	Time:	4) Received by:		Date:	Time:	To be completed by Laboratory personnel:											
								Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> Hand carried											
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.		5) Relinquished by:		6) Received for Laboratory by:		Date:	Time:	Sample Disposal											
Laboratory Notes:								<input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal											
								Sample Locator No.											

White Copy - Original (Accompanies Sample)

Yellow Copy - Centrum File

Pink Copy - Centrum duplicate

V.L.S. Verifying Laboratory Sample  
Gold Copy - Client Copy



Centrum  
Analytical  
Laboratories, Inc.

1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

# \*IN-HOUSE JOB # 19220\*

Chain of Custody Record

Centrum Job # M4-291

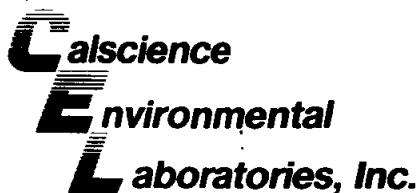
3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617

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lab@centrum-labs.com

Page 2 of 2

Project No:		Project Name: <i>Reliable Steel</i>		Please Circle Analyses Requested																			
Project Manager:		Phone:	Fax:	Turn-Around Time																			
Client Name: (Report and Billing) <i>BT Corporation</i>		Address: (Report and Billing) <i>3347 Michelson Dr. Ste 200 Irvine CA. 92612</i>		8015A: Diesel, Fuel Screen, Carbon Chain	8015A: Gas only	8021B: BTEX/NHBE Only	418.1 (TRPH), 413.2, 1664	GC or GCMS Volatiles by 5035*			GCMS: 8289B, 8021B, 624, 524.2	MSBE Conf. Only: BTEX/Oxygenates Only	GCMS: 8279C, 625	Pesticides, PCBs, Pest/PCB	Metals: Total 22 (CA91) RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint (HxG)	<input type="checkbox"/> 24 Hr. RUSH*	<input type="checkbox"/> 48 Hr. RUSH*	<input checked="" type="checkbox"/> Normal TAT			
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type																	
11	CB-5C@15'	9/13/1	1125	Soil		3 Enclosures																	
12	CB-5C@20'		140			+1 steel spec																	
13	CB-5C@25'																						
14	CB-5C@30'																						
15	CB-1C@6'																						
16	CB-1C@10'																						
17	CB-1C@20'																						
18	CB-1C@25'																						
19	CB-1C@30'																						
20	CB-1C@35'																						
1) Relinquished by: (Sampler's Signature)				Date:	Time:	3) Relinquished by:				Date:	Time:	To be completed by Laboratory personnel:				Sample Disposal							
2) Received by:				Date:	Time:	4) Received by:				Date:	Time:	Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> From Field				<input type="checkbox"/> Client will pick up							
<i>[Signature]</i>				9/13/1								Custody seals? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				<input type="checkbox"/> Return to client							
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.				5) Relinquished by:				Date:				Time:	All sample containers intact? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				<input type="checkbox"/> Lab disposal						
														<input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> Hand carried									
Laboratory Notes:																				Sample Locator No.:			



September 21, 2001

Gary Cronk  
IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Subject: Calscience Work Order No.: **01-09-0668**  
Client Reference: **Jervis B. Webb of California**

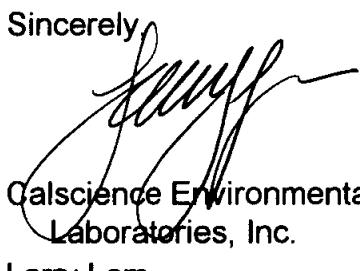
Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/18/01 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, require sampling supplies or field services, or information on our analytical services, please feel free to call me at (714) 895-5494.

Sincerely,

  
Calscience Environmental  
Laboratories, Inc.

Larry Lem  
Project Manager

  
Michael J. Crisostomo  
Quality Assurance Manager

**ANALYTICAL REPORT**

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: N/A  
Method: EPA 8260B

Project: Jervis B. Webb of California

Page 1 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
CB-4030*	01-09-0668-1	09/18/01	Solid	N/A	09/19/01	091901AS

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	1		ug/kg	1,3-Dichloropropane	ND	5.0	1		ug/kg
Benzene	ND	5.0	1		ug/kg	2,2-Dichloropropane	ND	5.0	1		ug/kg
Bromobenzene	ND	5.0	1		ug/kg	1,1-Dichloropropene	ND	5.0	1		ug/kg
Bromochloromethane	ND	5.0	1		ug/kg	c-1,3-Dichloropropene	ND	5.0	1		ug/kg
Bromodichloromethane	ND	5.0	1		ug/kg	t-1,3-Dichloropropene	ND	5.0	1		ug/kg
Bromoform	ND	5.0	1		ug/kg	Ethylbenzene	ND	5.0	1		ug/kg
Bromomethane	ND	5.0	1		ug/kg	2-Hexanone	ND	50	1		ug/kg
2-Butanone	ND	50	1		ug/kg	Isopropylbenzene	ND	5.0	1		ug/kg
n-Butylbenzene	ND	5.0	1		ug/kg	p-Isopropyltoluene	ND	5.0	1		ug/kg
sec-Butylbenzene	ND	5.0	1		ug/kg	Methylene Chloride	ND	50	1		ug/kg
tert-Butylbenzene	ND	5.0	1		ug/kg	4-Methyl-2-Pentanone	ND	50	1		ug/kg
Carbon Disulfide	ND	50	1		ug/kg	Naphthalene	ND	50	1		ug/kg
Carbon Tetrachloride	ND	5.0	1		ug/kg	n-Propylbenzene	ND	5.0	1		ug/kg
Chlorobenzene	ND	5.0	1		ug/kg	Styrene	ND	5.0	1		ug/kg
Chloroethane	ND	5.0	1		ug/kg	1,1,1,2-Tetrachloroethane	ND	5.0	1		ug/kg
Chloroform	ND	5.0	1		ug/kg	1,1,2,2-Tetrachloroethane	ND	5.0	1		ug/kg
Chloromethane	ND	5.0	1		ug/kg	Tetrachloroethene	50	5	1		ug/kg
2-Chlorotoluene	ND	5.0	1		ug/kg	Toluene	ND	5.0	1		ug/kg
4-Chlorotoluene	ND	5.0	1		ug/kg	1,2,3-Trichlorobenzene	ND	10	1		ug/kg
Dibromochloromethane	ND	5.0	1		ug/kg	1,2,4-Trichlorobenzene	ND	5.0	1		ug/kg
1,2-Dibromo-3-Chloropropane	ND	10	1		ug/kg	1,1,1-Trichloroethane	ND	5.0	1		ug/kg
1,2-Dibromoethane	ND	5.0	1		ug/kg	1,1,2-Trichloroethane	ND	5.0	1		ug/kg
Dibromomethane	ND	5.0	1		ug/kg	Trichloroethene	510	5	1		ug/kg
1,2-Dichlorobenzene	ND	5.0	1		ug/kg	Trichlorofluoromethane	ND	50	1		ug/kg
1,3-Dichlorobenzene	ND	5.0	1		ug/kg	1,2,3-Trichloropropane	ND	5.0	1		ug/kg
1,4-Dichlorobenzene	ND	5.0	1		ug/kg	1,2,4-Trimethylbenzene	ND	5.0	1		ug/kg
Dichlorodifluoromethane	ND	5.0	1		ug/kg	1,3,5-Trimethylbenzene	ND	5.0	1		ug/kg
1,1-Dichloroethane	ND	5.0	1		ug/kg	Vinyl Acetate	ND	50	1		ug/kg
1,2-Dichloroethane	ND	5.0	1		ug/kg	Vinyl Chloride	ND	5.0	1		ug/kg
1,1-Dichloroethene	ND	5.0	1		ug/kg	p/m-Xylene	ND	5.0	1		ug/kg
c-1,2-Dichloroethene	ND	5.0	1		ug/kg	o-Xylene	ND	5.0	1		ug/kg
t-1,2-Dichloroethene	ND	5.0	1		ug/kg	Methyl-t-Butyl Ether (MTBE)	ND	5.0	1		ug/kg
1,2-Dichloropropane	ND	5.0	1		ug/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	80-120		Toluene-d8	100	81-117	
1,4-Bromofluorobenzene	89	74-121					

RL - Reporting Limit      DF - Dilution Factor      Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

001587

## ANALYTICAL REPORT

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: N/A  
Method: EPA 8260B

Project: Jervis B. Webb of California

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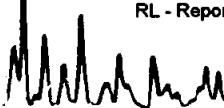
Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
CB-3@26'	01-09-0668-2	09/18/01	Solid	N/A	09/18/01	091901AS

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	1		ug/kg	1,3-Dichloropropane	ND	5.0	1		ug/kg
Benzene	ND	5.0	1		ug/kg	2,2-Dichloropropane	ND	5.0	1		ug/kg
Bromobenzene	ND	5.0	1		ug/kg	1,1-Dichloropropene	ND	5.0	1		ug/kg
Bromoform	ND	5.0	1		ug/kg	c-1,3-Dichloropropene	ND	5.0	1		ug/kg
Bromochloromethane	ND	5.0	1		ug/kg	t-1,3-Dichloropropene	ND	5.0	1		ug/kg
Bromodichloromethane	ND	5.0	1		ug/kg	Ethylbenzene	ND	5.0	1		ug/kg
Bromomethane	ND	5.0	1		ug/kg	2-Hexanone	ND	50	1		ug/kg
2-Butanone	ND	50	1		ug/kg	Isopropylbenzene	ND	5.0	1		ug/kg
n-Butylbenzene	ND	5.0	1		ug/kg	p-Isopropyltoluene	ND	5.0	1		ug/kg
sec-Butylbenzene	ND	5.0	1		ug/kg	Methylene Chloride	ND	50	1		ug/kg
tert-Butylbenzene	ND	5.0	1		ug/kg	4-Methyl-2-Pentanone	ND	50	1		ug/kg
Carbon Disulfide	ND	50	1		ug/kg	Naphthalene	ND	50	1		ug/kg
Carbon Tetrachloride	ND	5.0	1		ug/kg	n-Propylbenzene	ND	5.0	1		ug/kg
Chlorobenzene	ND	5.0	1		ug/kg	Styrene	ND	5.0	1		ug/kg
Chloroethane	ND	5.0	1		ug/kg	1,1,1,2-Tetrachloroethane	ND	5.0	1		ug/kg
Chloroform	ND	5.0	1		ug/kg	1,1,2,2-Tetrachloroethane	ND	5.0	1		ug/kg
Chloromethane	ND	5.0	1		ug/kg	Tetrachloroethene	62	5	1		ug/kg
2-Chlorotoluene	ND	5.0	1		ug/kg	Toluene	ND	5.0	1		ug/kg
4-Chlorotoluene	ND	5.0	1		ug/kg	1,2,3-Trichlorobenzene	ND	10	1		ug/kg
Dibromochloromethane	ND	5.0	1		ug/kg	1,2,4-Trichlorobenzene	ND	5.0	1		ug/kg
1,2-Dibromo-3-Chloropropane	ND	10	1		ug/kg	1,1,1-Trichloroethane	ND	5.0	1		ug/kg
1,2-Dibromoethane	ND	5.0	1		ug/kg	1,1,2-Trichloroethane	ND	5.0	1		ug/kg
Dibromomethane	ND	5.0	1		ug/kg	Trichloroethene	340	5	1		ug/kg
1,2-Dichlorobenzene	ND	5.0	1		ug/kg	Trichlorofluoromethane	ND	50	1		ug/kg
1,3-Dichlorobenzene	ND	5.0	1		ug/kg	1,2,3-Trichloropropane	ND	5.0	1		ug/kg
1,4-Dichlorobenzene	ND	5.0	1		ug/kg	1,2,4-Trimethylbenzene	ND	5.0	1		ug/kg
Dichlorodifluoromethane	ND	5.0	1		ug/kg	1,3,5-Trimethylbenzene	ND	5.0	1		ug/kg
1,1-Dichloroethane	ND	5.0	1		ug/kg	Vinyl Acetate	ND	50	1		ug/kg
1,2-Dichloroethane	ND	5.0	1		ug/kg	Vinyl Chloride	ND	5.0	1		ug/kg
1,1-Dichloroethene	ND	5.0	1		ug/kg	p/m-Xylene	ND	5.0	1		ug/kg
c-1,2-Dichloroethene	ND	5.0	1		ug/kg	o-Xylene	ND	5.0	1		ug/kg
t-1,2-Dichloroethene	ND	5.0	1		ug/kg	Methyl-t-Butyl Ether (MTBE)	ND	5.0	1		ug/kg
1,2-Dichloropropane	ND	5.0	1		ug/kg						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	100	80-120		Toluene-d8	99	81-117	
1,4-Bromofluorobenzene	90	74-121					

RL - Reporting Limit      DF - Dilution Factor      Qual - Qualifiers

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## ANALYTICAL REPORT

IT Corporation  
 3347 Michelson Drive, Suite 200  
 Irvine, CA 92612-1692

Date Received: 09/18/01  
 Work Order No: 01-09-0668  
 Preparation: N/A  
 Method: EPA 8260B

Project: Jervis B. Webb of California

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Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-16-005-1,846	N/A	Solid	N/A	09/18/01	091801AS

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	50	1		ug/kg	1,3-Dichloropropane	ND	5.0	1		ug/kg
Benzene	ND	5.0	1		ug/kg	2,2-Dichloropropane	ND	5.0	1		ug/kg
Bromobenzene	ND	5.0	1		ug/kg	1,1-Dichloropropene	ND	5.0	1		ug/kg
Bromoform	ND	5.0	1		ug/kg	c-1,3-Dichloropropene	ND	5.0	1		ug/kg
Bromomethane	ND	5.0	1		ug/kg	t-1,3-Dichloropropene	ND	5.0	1		ug/kg
2-Butanone	ND	50	1		ug/kg	Ethylbenzene	ND	5.0	1		ug/kg
n-Butylbenzene	ND	5.0	1		ug/kg	2-Hexanone	ND	50	1		ug/kg
sec-Butylbenzene	ND	5.0	1		ug/kg	Isopropylbenzene	ND	5.0	1		ug/kg
tert-Butylbenzene	ND	5.0	1		ug/kg	p-Isopropyltoluene	ND	5.0	1		ug/kg
Carbon Disulfide	ND	50	1		ug/kg	Methylene Chloride	ND	50	1		ug/kg
Carbon Tetrachloride	ND	5.0	1		ug/kg	4-Methyl-2-Pentanone	ND	50	1		ug/kg
Chlorobenzene	ND	5.0	1		ug/kg	Naphthalene	ND	50	1		ug/kg
Chloroethane	ND	5.0	1		ug/kg	n-Propylbenzene	ND	5.0	1		ug/kg
Chloroform	ND	5.0	1		ug/kg	Styrene	ND	5.0	1		ug/kg
Chloromethane	ND	5.0	1		ug/kg	1,1,1,2-Tetrachloroethane	ND	5.0	1		ug/kg
2-Chlorotoluene	ND	5.0	1		ug/kg	1,1,2,2-Tetrachloroethane	ND	5.0	1		ug/kg
4-Chlorotoluene	ND	5.0	1		ug/kg	Tetrachloroethene	ND	5.0	1		ug/kg
Dibromochloromethane	ND	5.0	1		ug/kg	Toluene	ND	5.0	1		ug/kg
1,2-Dibromo-3-Chloropropane	ND	10	1		ug/kg	1,2,3-Trichlorobenzene	ND	10	1		ug/kg
1,2-Dibromoethane	ND	5.0	1		ug/kg	1,2,4-Trichlorobenzene	ND	5.0	1		ug/kg
Dibromomethane	ND	5.0	1		ug/kg	1,1,1-Trichloroethane	ND	5.0	1		ug/kg
1,2-Dichlorobenzene	ND	5.0	1		ug/kg	1,1,2-Trichloroethane	ND	5.0	1		ug/kg
1,3-Dichlorobenzene	ND	5.0	1		ug/kg	Trichloroethene	ND	5.0	1		ug/kg
1,4-Dichlorobenzene	ND	5.0	1		ug/kg	Trichlorofluoromethane	ND	50	1		ug/kg
Dichlorodifluoromethane	ND	5.0	1		ug/kg	1,2,3-Trichloropropane	ND	5.0	1		ug/kg
1,1-Dichloroethane	ND	5.0	1		ug/kg	1,2,4-Trimethylbenzene	ND	5.0	1		ug/kg
1,2-Dichloroethane	ND	5.0	1		ug/kg	1,3,5-Trimethylbenzene	ND	5.0	1		ug/kg
1,1-Dichloroethene	ND	5.0	1		ug/kg	Vinyl Acetate	ND	50	1		ug/kg
c-1,2-Dichloroethene	ND	5.0	1		ug/kg	Vinyl Chloride	ND	5.0	1		ug/kg
t-1,2-Dichloroethene	ND	5.0	1		ug/kg	p/m-Xylene	ND	5.0	1		ug/kg
1,2-Dichloropropane	ND	5.0	1		ug/kg	o-Xylene	ND	5.0	1		ug/kg
						Methyl-t-Butyl Ether (MTBE)	ND	5.0	1		ug/kg

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	103	80-120		Toluene-d8	99	81-117	
1,4-Bromofluorobenzene	90	74-121					

RL - Reporting Limit      DF - Dilution Factor      Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

**ANALYTICAL REPORT**

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: EPA 1312  
Method: EPA 8260B

Project: Jervis B. Webb of California

Page 1 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
CB-4030	01-09-0668-1	09/18/01	Solid	09/20/01	09/21/01	002001BSP

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	1.4	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	10	1	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	94	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	96	86-115					

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

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001590

**ANALYTICAL REPORT**

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: EPA 1312  
Method: EPA 8260B

Project: Jervis B. Webb of California

Page 2 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
CB-3@25'	01-09-0668-2	09/18/01	Solid	09/20/01	09/21/01	092001BSP

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromoform	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	2.7	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	96	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit , DF - Dilution Factor , Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501

001591



## ANALYTICAL REPORT

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: EPA 1312  
Method: EPA 8260B

Project: Jervis B. Webb of California

Page 3 of 3

Client Sample Number:	Lab Sample Number:	Date Collected:	Matrix:	Date Prepared:	Date Analyzed:	QC Batch ID:
Method Blank	099-16-006-3,361	N/A	Aqueous	09/20/01	09/21/01	092001BSP

Parameter	Result	RL	DF	Qual	Units	Parameter	Result	RL	DF	Qual	Units
Acetone	ND	10	1		ug/L	1,3-Dichloropropane	ND	1.0	1		ug/L
Benzene	ND	0.50	1		ug/L	2,2-Dichloropropane	ND	1.0	1		ug/L
Bromobenzene	ND	1.0	1		ug/L	1,1-Dichloropropene	ND	1.0	1		ug/L
Bromochloromethane	ND	1.0	1		ug/L	c-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromodichloromethane	ND	1.0	1		ug/L	t-1,3-Dichloropropene	ND	0.50	1		ug/L
Bromoform	ND	1.0	1		ug/L	Ethylbenzene	ND	1.0	1		ug/L
Bromomethane	ND	1.0	1		ug/L	2-Hexanone	ND	10	1		ug/L
2-Butanone	ND	10	1		ug/L	Isopropylbenzene	ND	1.0	1		ug/L
n-Butylbenzene	ND	1.0	1		ug/L	p-Isopropyltoluene	ND	1.0	1		ug/L
sec-Butylbenzene	ND	1.0	1		ug/L	Methylene Chloride	ND	10	1		ug/L
tert-Butylbenzene	ND	1.0	1		ug/L	4-Methyl-2-Pentanone	ND	10	1		ug/L
Carbon Disulfide	ND	10	1		ug/L	Naphthalene	ND	10	1		ug/L
Carbon Tetrachloride	ND	0.50	1		ug/L	n-Propylbenzene	ND	1.0	1		ug/L
Chlorobenzene	ND	1.0	1		ug/L	Styrene	ND	1.0	1		ug/L
Chloroethane	ND	1.0	1		ug/L	1,1,1,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloroform	ND	1.0	1		ug/L	1,1,2,2-Tetrachloroethane	ND	1.0	1		ug/L
Chloromethane	ND	1.0	1		ug/L	Tetrachloroethene	ND	1.0	1		ug/L
2-Chlorotoluene	ND	1.0	1		ug/L	Toluene	ND	1.0	1		ug/L
4-Chlorotoluene	ND	1.0	1		ug/L	1,2,3-Trichlorobenzene	ND	1.0	1		ug/L
Dibromochloromethane	ND	1.0	1		ug/L	1,2,4-Trichlorobenzene	ND	1.0	1		ug/L
1,2-Dibromo-3-Chloropropane	ND	5.0	1		ug/L	1,1,1-Trichloroethane	ND	1.0	1		ug/L
1,2-Dibromoethane	ND	1.0	1		ug/L	1,1,2-Trichloroethane	ND	1.0	1		ug/L
Dibromomethane	ND	1.0	1		ug/L	Trichloroethene	ND	1.0	1		ug/L
1,2-Dichlorobenzene	ND	1.0	1		ug/L	Trichlorofluoromethane	ND	10	1		ug/L
1,3-Dichlorobenzene	ND	1.0	1		ug/L	1,2,3-Trichloropropane	ND	5.0	1		ug/L
1,4-Dichlorobenzene	ND	1.0	1		ug/L	1,2,4-Trimethylbenzene	ND	1.0	1		ug/L
Dichlorodifluoromethane	ND	1.0	1		ug/L	1,3,5-Trimethylbenzene	ND	1.0	1		ug/L
1,1-Dichloroethane	ND	1.0	1		ug/L	Vinyl Acetate	ND	10	1		ug/L
1,2-Dichloroethane	ND	0.50	1		ug/L	Vinyl Chloride	ND	0.50	1		ug/L
1,1-Dichloroethene	ND	1.0	1		ug/L	p/m-Xylene	ND	1.0	1		ug/L
c-1,2-Dichloroethene	ND	1.0	1		ug/L	o-Xylene	ND	1.0	1		ug/L
t-1,2-Dichloroethene	ND	1.0	1		ug/L	Methyl-t-Butyl Ether (MTBE)	ND	1.0	1		ug/L
1,2-Dichloropropane	ND	1.0	1		ug/L						

Surrogates:	REC (%)	Control Limits	Qual	Surrogates:	REC (%)	Control Limits	Qual
Dibromofluoromethane	105	86-118		Toluene-d8	102	88-110	
1,4-Bromofluorobenzene	97	86-115					

RL - Reporting Limit    DF - Dilution Factor    Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1432 • TEL: (714) 895-5494 • FAX: (714) 894-7501





## Quality Control - Spike/Spike Duplicate

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: N/A  
Method: EPA 8260B

Project: Jervis B. Webb of California

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-09-0649-11	Solid	GC/MS L	N/A	09/20/01	0109064911

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	98	99	72-127	1	0-25	
Carbon Tetrachloride	93	96	70-130	3	0-25	
Chlorobenzene	98	97	72-131	0	0-25	
1,2-Dichlorobenzene	98	101	70-130	3	0-25	
1,1-Dichloroethene	100	99	69-127	1	0-25	
Toluene	96	97	75-124	2	0-25	
Trichloroethene	101	105	60-137	3	0-25	
Vinyl Chloride	105	105	70-130	0	0-25	
Methyl-t-Butyl Ether (MTBE)	97	101	80-120	4	0-25	

**Quality Control - LCS/LCS Duplicate**

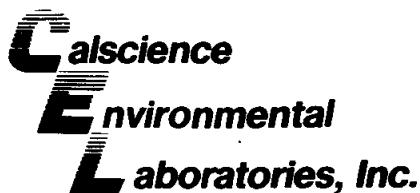
IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: N/A  
Method: EPA 8260B

Project: Jervis B. Webb of California

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
099-10-006-1,946	Solid	GC/MS L	N/A	09/19/01	091901AS

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	96	100	72-127	4	0-25	
Carbon Tetrachloride	93	96	70-130	2	0-25	
Chlorobenzene	97	99	72-131	2	0-25	
1,2-Dichlorobenzene	97	101	70-130	4	0-25	
1,1-Dichloroethene	97	97	69-127	0	0-25	
Toluene	94	98	75-124	4	0-25	
Trichloroethene	96	99	60-137	4	0-25	
Vinyl Chloride	102	102	79-118	1	0-25	
Methyl-t-Butyl Ether (MTBE)	96	99	80-120	3	0-25	



## Quality Control - Spike/Spike Duplicate

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: N/A  
Method: EPA 8260B

Project: Jervis B. Webb of California

Spiked Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	MS/MSD Batch Number
01-09-0766-2	Aqueous	GC/MS U	N/A	09/21/01	0109076602

Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	105	104	72-127	1	0-25	
Carbon Tetrachloride	110	110	70-130	1	0-25	
Chlorobenzene	105	105	72-131	0	0-25	
1,2-Dichlorobenzene	107	107	70-130	0	0-25	
1,1-Dichloroethene	101	103	69-127	1	0-25	
Toluene	108	107	75-124	1	0-25	
Trichloroethene	108	107	60-137	1	0-25	
Vinyl Chloride	92	92	70-130	1	0-25	
Methyl-t-Butyl Ether (MTBE)	112	111	80-120	1	0-25	



## Quality Control - LCS/LCS Duplicate

IT Corporation  
3347 Michelson Drive, Suite 200  
Irvine, CA 92612-1692

Date Received: 09/18/01  
Work Order No: 01-09-0668  
Preparation: EPA 1312  
Method: EPA 8260B

Project: Jervis B. Webb of California

LCS Sample Number	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number
088-18-408-3,361	Aqueous	GC/MS U	N/A	09/21/01	082001BSP

Parameter	LCS %REC	LCSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	104	105	72-127	1	0-25	
Carbon Tetrachloride	108	111	70-130	3	0-25	
Chlorobenzene	104	105	72-131	0	0-25	
1,2-Dichlorobenzene	106	107	70-130	1	0-25	
1,1-Dichloroethene	98	102	69-127	3	0-25	
Toluene	106	108	75-124	2	0-25	
Trichloroethene	106	106	60-137	0	0-25	
Vinyl Chloride	89	92	79-118	4	0-25	
Methyl-t-Butyl Ether (MTBE)	107	109	80-120	1	0-25	



## GLOSSARY OF TERMS AND QUALIFIERS

Work Order Number: 01-09-0668

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<u>Qualifier</u>	<u>Definition</u>
ND	Not detected at indicated reporting limit.

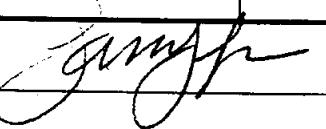
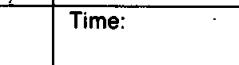
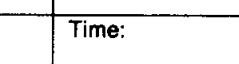
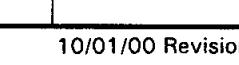


SCIENCE ENVIRONMENTAL  
LABORATORIES, INC.

7440 LINCOLN WAY  
GARDEN GROVE, CA 92841-1432  
TEL: (714) 895-5494 • FAX: (714) 894-7501

C...IN C...CUL...JDY...ECC...

Date 09-21-01Page 1 of 1

LABORATORY CLIENT: <b>IT Corporation</b>						CLIENT PROJECT NAME / NUMBER: <b>JERVIS B. WEBB OF CA</b>						P.O. NO.:								
ADDRESS: <b>3347 MICHELSON DR, STE 200</b>						PROJECT CONTACT: <b>GARY CROMIE</b>						LAB USE ONLY <input type="checkbox"/> - <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>								
CITY <b>IRVINE</b>		STATE <b>CA</b>		ZIP <b>92612</b>		SAMPLER(S): (SIGNATURE)						COOLER RECEIPT TEMP = <u>  </u> °C								
TEL: <b>949-660-7511</b>		FAX:		E-MAIL:		REQUESTED ANALYSES														
TURNAROUND TIME <input type="checkbox"/> SAME DAY <input type="checkbox"/> 24 HR <input type="checkbox"/> 48 HR <input type="checkbox"/> 72 HR <input type="checkbox"/> 5 DAYS <input type="checkbox"/> 10 DAYS																				
SPECIAL REQUIREMENTS (ADDITIONAL COSTS MAY APPLY) <input type="checkbox"/> RWQCB REPORTING <input type="checkbox"/> ARCHIVE SAMPLES UNTIL <u>  </u> / <u>  </u> / <u>  </u> .																				
SPECIAL INSTRUCTIONS																				
LAB USE ONLY	SAMPLE ID	LOCATION/DESCRIPTION	SAMPLING		MATRIX	NO. OF CONT.	TPH (G)	TPH (D) or	BTEX / MTBE (8021B)	HALOCARBONS (8021B)	VOCs (8035 / 8260B) EnCore	SVOCs (8270C)	PEST (8081A)	PCBs (8082)	EOB / DBCP (504.1) or (8011)	CAC, T22 METALS (6010B)	PMA (8310)	VOCs (T0-14A) or (T0-15)	CH <sub>4</sub> / TGNMDO (25.1)	FIXED GASES (25.1) or (D1946)
			DATE	TIME			S	1	1	1	1	1	1	1	1	1	1	1	1	1
Relinquished by: (Signature) 			Received by: (Signature) <b>FED-EX</b>									Date: <u>09-21-01</u>	Time: 							
Relinquished by: (Signature) 			Received by: (Signature) <b>FED-EX</b>									Date: 	Time: 							
Relinquished by: (Signature) <b>FED-EX</b>			Received for Laboratory by: (Signature)									Date: 	Time: 							

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

Please note that pages 1 and 2 of 2 of our T/Cs are printed on the reverse side of the Yellow and Pink copies respectively.

# **CALSCIENCE CHANGE ORDER**

**ORDER:** 01-09-0668  
**PROJECT:** JERVIS B. WEERS OF CA.

**CHANGE:**

ADD STAIN & T 8260

TO BOTH Samples

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**T'A'T:** 2 Day

**REQUESTED BY:**

Gray Connk 09-21-01

**Approved by Client:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**FROM:** u **DATE:** 09/21/01



**Centrum  
Analytical  
Laboratories, Inc.**

1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617

## (668) Chain of Custody Record

Centrum Job #

www.centrum-labs.com

lab@centrum-labs.com

Page 1 of 1

Project No:		Project Name: <i>Jervis B Webb of California</i>		Please Circle Analyses Requested															
Project Manager:		Phone:	Fax:																
Client Name: (Report and Billing)		Address: (Report and Billing)																	
IT Corp.		3347 Michelson Dr Ste 200 Irvine CA 92612-1692																	
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled	Sample matrix	Site location	Containers: # and type	8015M: Diesel, Fuel Screen, Carbon Chain	8015M: Gas only	8021B: BTEX/MTBE Only	418.1 (TRPH), 413.2, 1664	X SPK Extraction by EPA 1312/f2626	GC or GCMS Volatiles by 5035*	GCMS: 8260B, 8021B, 624, 524.2	GCMS: MTBE Conf. Only, BTEX/Oxygenates Only	8080: Pesticides, PCBs, Pest/PCB	Metals: Title 22 (CAM), RCRA, PP	pH, TDS, TSS, Conductivity	Flashpoint, Hex Cr	Turn-Around Time
	CB-4030'			Soil														<input checked="" type="checkbox"/> 24 Hr. RUSH*	
	CB3025'			Soil														<input checked="" type="checkbox"/> 48 Hr. RUSH*	
																		<input type="checkbox"/> Normal TAT	
*Requires PRIOR approval, additional charges apply																			
Requested due date: _____																			
Remarks/Special Instructions <i>Please forward samples to IT EM COR STERLING FOREST 371 Conte 17A Tuxedo, NY 10987-3006 Attn. Rasheed Ahmed when completed per Gary Crank</i>																			
1) Relinquished by: (Sampler's Signature) <i>G. Crank</i>				Date: 9/18	Time: 1435	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:  Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried						Sample Disposal  <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal			
2) Received by:				Date:	Time:	4) Received by:		Date:	Time:										
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.						5) Relinquished by:		Date:	Time:	6) Received for Laboratory by: <i>G. Crank</i>		Date: 9/18/01	Time: 1435	Sample Locator No.					
						6) Received for Laboratory by:		Date:	Time:										
Laboratory Notes:																			

# CALSCIENCE CHANGE ORDER

**ORDER:** 01-09-0668  
**PROJECT:** JAMES B. WEERS OF CA.

**CHANGE:**

ADD STRONTIUM EGG  
TO TOOTH SAMPLES

**T'A'T:** 2 Day

**REQUESTED BY:**

Gerry Conne 09-21-01

**Approved by Client:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**FROM:** n      **DATE:** 09/21/01



**Centrum  
Analytical  
Laboratories, Inc.**

1401 Research Park Drive, Suite 100  
Riverside, CA 92507  
Voice: 909.779.0310 • 800.798.9336  
Fax: 909.779.0344

## (663) Chain of Custody Record

Centrum Job #

3299 Hill Street, Suite 305  
Signal Hill, CA 90806  
Voice: 562.498.7005  
Fax: 562.498.8617

www.centrum-labs.com

lab@centrum-labs.com

Page 1 of 1

Project No:		Project Name:		<b>Please Circle Analyses Requested</b>					
		Jervis B Webb of California							
Project Manager:		Phone: 949-261-8441, 949-474-8367		<input type="checkbox"/> 24 Hr. RUSH* <input checked="" type="checkbox"/> 48 Hr. RUSH* <input type="checkbox"/> Normal TAT					
Client Name: (Report and Billing)		Address: (Report and Billing)							
IT Corp		3347 Michelson Dr STE 200 Irvine CA 92612-1682		<small>* Requires PRIOR approval, additional charges apply</small>					
Centrum ID (Lab use only)	Sample ID (As it should appear on report)	Date sampled	Time sampled						Sample matrix
	CB-4030'			Soil			8015M: Gas only		
	CB3025'			Soil			8021B: BTEX/IMM/BB Only		
							418.1 (TRPH), 413.2, 1664		
							X SPL Pesticides by 1/12/1997		
							GC or GCMS Volatiles by 5035*		
							GCMS: 8260B, 8021B, 624, 524.2		
							GCMS: MIBE Conf. Only, BTEX/Oxygenates Only		
							GCMS: 8270C, 625		
							8080: Pesticides, PCBs, Pest/PCB		
							Metals: Title 22 (CAM), RCRA, PP		
							pH, TDS, TSS, Conductivity		
1) Relinquished by: (Sampler's Signature)		Date: 9/18	Time: 1435	3) Relinquished by:		Date:	Time:	To be completed by Laboratory personnel:  Samples chilled? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> From Field Custody seals? <input type="checkbox"/> Yes <input type="checkbox"/> No All sample containers intact? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Courier <input type="checkbox"/> UPS/Fed Ex <input type="checkbox"/> Hand carried	
2) Received by:		Date:	Time:	4) Received by:		Date:	Time:		
The delivery of samples and the signature on this chain of custody form constitutes authorization to perform the analyses specified above under the Terms and Conditions set forth on the back hereof.		5) Relinquished by:  6) Received for Laboratory by:		Date: 9/18/01 Time: 1435		Sample Disposal  <input type="checkbox"/> Client will pick up <input type="checkbox"/> Return to client <input type="checkbox"/> Lab disposal			
								Laboratory Notes:  Jervis B Webb	
								Sample Locator No.	

**APPENDIX  
C**

91B-2-99

001604

**APPENDIX C**

**GEOTECHNICAL LABORATORY REPORTS**

IT/EMCON

**Geotechnical Laboratory**  
371 Rt. 17A Sterling Forest  
Tuxedo, New York 10987  
Ph:(845)351-5100 Fax:(845)351-5199

TO I.T. Corporation  
3347 Michelson Dr., Suite 200  
Irvine, CA 92612

**LETTER OF TRANSMITTAL**

Date 9-26-01	Job No. 831461
Attention: <b>Gary Cronk</b>	
RE:	
<b>Lab Testing</b>	
Jervis B Webb of CA	

**WE ARE SENDING YOU ATTACHED:**

	Samples	X	Test results
--	---------	---	--------------

x

## Test results

# 7444

**THESE ARE TRANSMITTED as checked below:**

For approval

Approved as submitted

Resubmit \_\_\_ copies  
for approval

As requested

Returned for corrections

Return \_\_\_ corrected prints

**For review and comment**

10

## REMARKS

If you have any questions, please call 845-351-5100.

COPY TO (2) copies

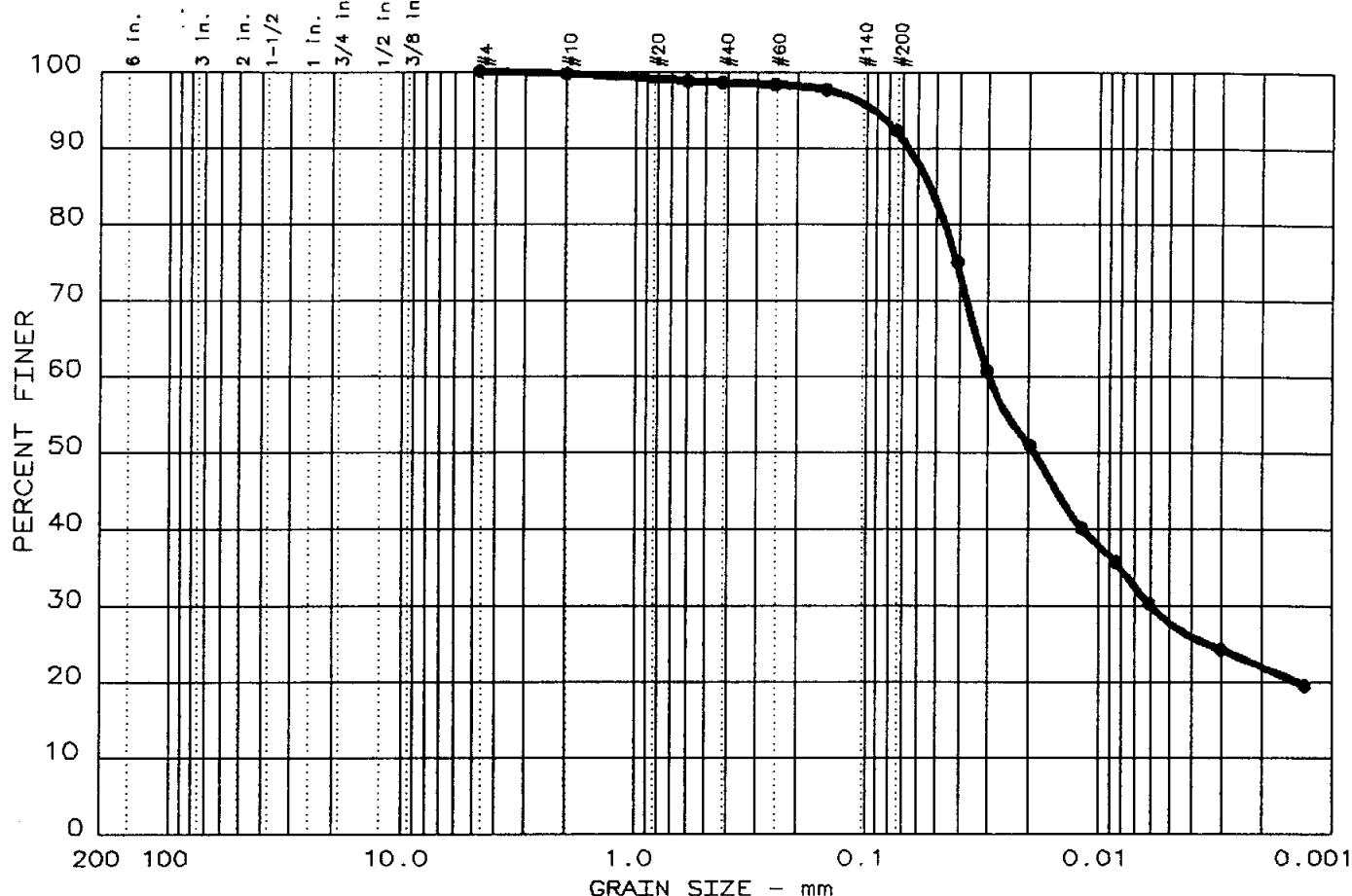
**SIGNED:**

EM\NY-GL\TRANSLET\Webb7444.xls

(Signed)

001606

# GRAIN SIZE DISTRIBUTION TEST REPORT



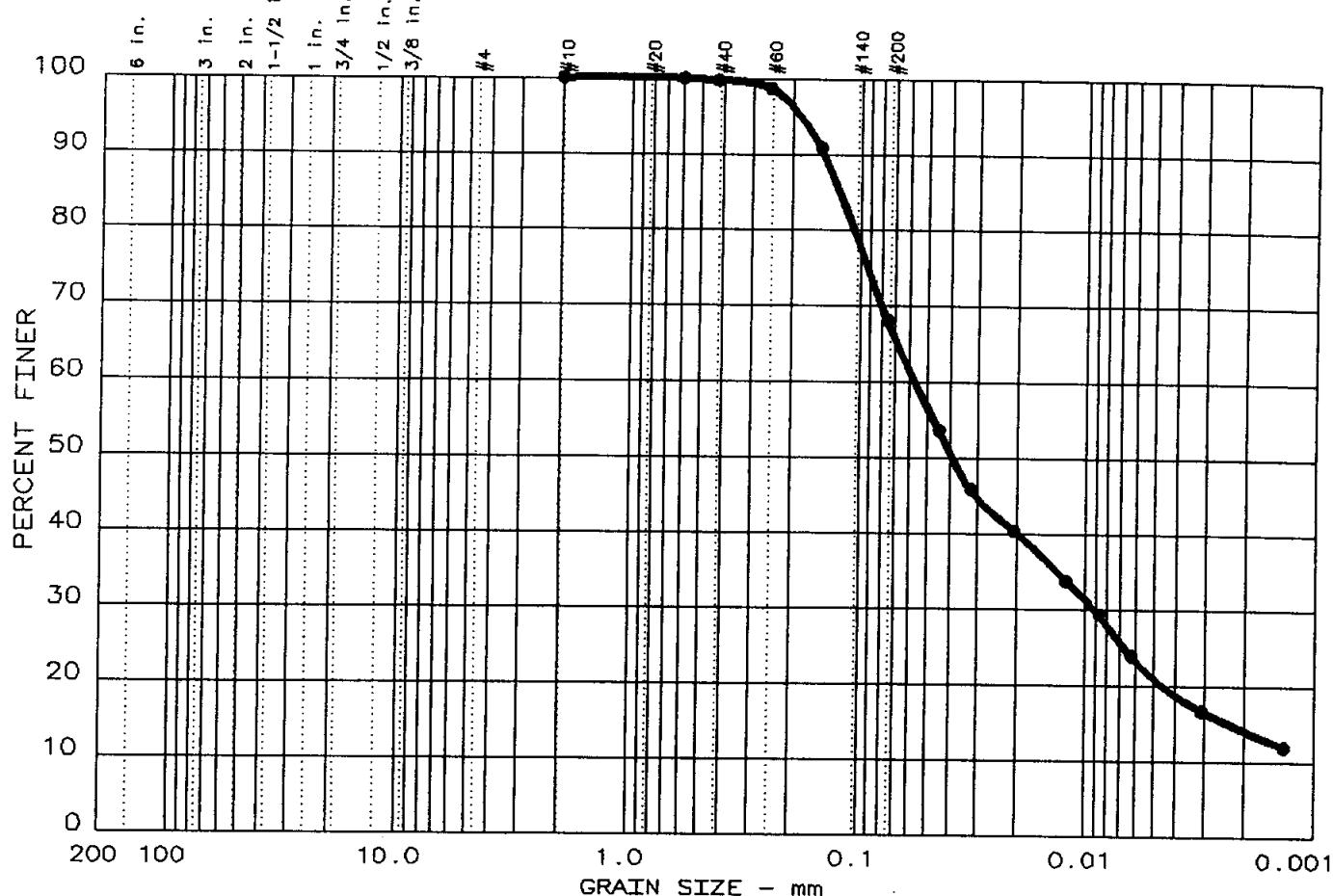
Test	% +3"	% GRAVEL	% SAND		% SILT		% CLAY	
• 17	0.0	0.0	7.7		64.6		27.7	

LL	PI	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>
•				0.0187	0.0059				

MATERIAL DESCRIPTION				ASTM	BURMISTER	AASHTO
• Olive Gray RECV'D IN 1" DIAMETER TUBE - SAMPLE QUANTITY LIMITED						

Project No.: 831461	Date: 9-26-01	Performed by: L.B./M.S.
Project: JERVIS B WEBB OF CA		Entered by: L.B.
Client: IT-IRVINE, CA		Checked by: R.S.A.
• Sample: CB-3 @ 25'	Sample No.:	Remarks: MOISTURE CONTENT = 31.6%
<b>EMCON</b>		Fig. No.: EM NY-GL

# GRAIN SIZE DISTRIBUTION TEST REPORT



Test	% +3"	% GRAVEL	% SAND		% SILT		% CLAY	
● 18	0.0	0.0	32.0		47.1		20.9	

LL	PI	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	C <sub>c</sub>	C <sub>u</sub>
●		0.123		0.0385	0.0090	0.0023			

MATERIAL DESCRIPTION				ASTM	BURMISTER	AASHTO
● Olive Gray RECVD IN 1"DIAMETER TUBE-SAMPLE QUANTITY LIMITED						

Project No.: 831461	Date: 9-26-01
Project: JERVIS B WEBB OF CA	
Client: IT-IRVINE, CA	
● Sample: CB-4 @ 30'	Sample No.:

Performed by: L.B./M.S.  
 Entered by: L.B.  
 Checked by: R.S.A.  
 Remarks:  
 MOISTURE CONTENT = 26.0%

Fig. No.: EM NY-GL

EMCON

001608

**APPENDIX**  
**D**

**APPENDIX D**

**HISTORIC DATA TABLES AND FIGURES FROM WORK  
PLAN FOR CLOSURE (IT CORPORATION 2001)**

Table 1. Summary of Water Table Elevation Data  
 5030 Firestone Boulevard  
 South Gate, California  
 Project #21025-02

DATE	MW-1 (FMSL)	MW-2 (FMSL)	MW-3 (FMSL)	MW-4 (FMSL)	MW-5 (FMSL)
02/27/98	61.30	62.63	61.32	na	na
03/02/98	61.27	62.59	61.31	na	na
03/04/98	61.51	62.52	61.47	na	na
04/08/98	61.52	na	61.48	na	na
05/20/98	62.10	63.14	62.07	na	na
10/08/98	62.71	63.81	62.61	na	na
11/03/98	na	na	na	61.95*	62.81*
11/05/98	62.95	64.01	62.27	62.08	62.83
12/21/98	62.72	63.96	62.54	61.79	62.55
01/19/99	62.83	63.99	62.69	61.92	62.67
02/03/99	63.11	64.10	62.90	62.09	62.93
03/30/99	62.87	64.02	62.68	61.83	62.64
06/01/99	62.61	63.74	62.29	61.44	62.25
07/29/99	62.27	63.52	62.02	61.09	61.94
09/01/99	62.33	63.51	61.97	61.02	61.91
09/23/99	62.06	63.30	61.77	60.76	61.65
10/18/99	61.66	63.05	61.50	60.50	61.41
12/08/99	61.54	63.03	61.23	60.24	61.15
01/27/00	61.69	62.79	61.18	60.02	60.96
02/28/00	61.75	62.79	61.12	na	60.98
03/15/00	62.03	63.03	61.46	60.35	61.26
04/13/00	61.36	62.73	61.01	na	60.91
05/18/00	61.51	63.15	60.93	59.91	60.84
06/20/00	61.49	63.17	60.99	59.78	60.83
07/13/00	60.92	63.36	60.62	59.62	60.50
08/17/00	60.79	63.27	60.81	59.36	60.28
09/07/00	60.94	62.35	61.04	59.41	60.44
10/26/00	60.22	61.91	59.93	58.83	59.78
11/21/00	60.49	62.13	59.87	58.86	59.80
12/05/00	60.37	62.14	60.10	59.01	59.97

NOTES:

- 1) FMSL = feet above mean sea level
- 2) \* = well developed.
- 3) Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 3/6/98 by Rattray & Associates.
- 4) Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 12/21/98 by Rattray & Associates.
- 5) Data summarized from Erler & Kalinowski reports (EKI, 1998b, 1999a, 2000e).

Table 2. Summary of TCE and PCE Concentrations in Soil Gas  
 5030 Firestone Boulevard  
 South Gate, California  
 Project #21025-01

Parameter	SG-1-5 µg/L	SG-2-5 µg/L	SG-3-5 µg/L	SG-4-5 µg/L	SG-5-5 µg/L	SG-5-5 DUPLICATE µg/L	SG-6-5 µg/L	SG-7-5 µg/L	SG-8A-5 µg/L	SG-8B-5 µg/L	SG-8C-5 µg/L	SG-9-5 µg/L	SG-10-5 µg/L	SG-11-5 µg/L	SG-12-5 µg/L	SG-13-5 µg/L	SG-14-5 µg/L	SG-15-5 µg/L	SG-16-5 µg/L	SG-17-5 µg/L	SG-18-5 µg/L
PCE - tetrachloroethane	23	4.7	1.6	5.2	1.6	1.7	0.061	0.075	1.1	4.1	5.8	25	28	0.94	< 0.01	5	28	5.9	1	4.2	0.13
TCE - trichloroethene	9.6	3.9	3.9	8.9	1.5	1.6	< 0.01	< 0.01	2.3	4.4	4.5	11	13	0.47	< 0.01	7.9	8	4.7	0.96	2.2	0.074
1,1,1-TCA - 1,1,1-trichloroethane	0.5	0.5	0.15	0.13	0.044	0.043	0.013	< 0.01	0.46	0.65	0.59	0.71	0.26	0.036	< 0.01	0.18	0.5	0.2	0.046	0.2	0.017
TCE/PCE	0.4	0.8	2.4	1.7	0.9	0.9	0.2	0.1	2.1	1.1	0.8	0.4	0.5	0.5	1.0	1.6	0.3	0.8	1.0	0.5	0.6

Parameter	SG-19-5 µg/L	SG-20-5 µg/L	SG-21-5 µg/L	SG-22-5 µg/L	SG-23-5 µg/L	SG-24-5 µg/L	SG-24-5 DUPLICATE µg/L	SG-25-5 µg/L	SG-25-5 DUPLICATE µg/L	SG-26-5 µg/L	SG-27-5 µg/L	SG-28-5 µg/L	SG-29-2 µg/L	SG-30-3 µg/L	SG-31-3 µg/L	SG-32-5 µg/L	SG-33-5 µg/L	SG-34-5 µg/L	SG-35-5 µg/L	SG-36-5 µg/L	SG-37-5 µg/L
PCE - tetrachloroethane	0.12	0.74	3.7	25	1.3	0.57	0.68	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.036	0.028	0.021	< 0.01	3.2	6.3	1.9	3	2
TCE - trichloroethene	< 0.01	0.14	2.5	11	1.2	0.33	0.34	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.013	< 0.01	< 0.01	0.41	2.4	3.6	25	12
1,1,1-TCA - 1,1,1-trichloroethane	< 0.01	0.082	0.34	0.89	0.13	0.08	0.08	0.12	0.13	0.12	0.048	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.18	0.26	0.12	0.24	0.18
TCE/PCE	0.1	0.2	0.7	0.4	0.9	0.6	0.5	1.0	1.0	1.0	1.0	1.0	0.6	0.5	0.5	1.0	0.1	0.4	1.9	8.3	6.0

- NOTES:
- 1) Analyses performed by Interphase, Inc. in an on-site mobile laboratory.
  - 2) Samples collected on December 1 and 2, 1997.
  - 3) Sample depth indicated in sample name. Depth indicated by last number separated by a hyphen in each sample description (i.e., sample SG-5-5 collected at five feet below ground surface [BGS]). Soil gas collected at five feet BGS except at locations SG-29, SG-30, and SG-31.
  - 4) Additional compounds were detected as follows:  
 Chloroform: SG-1-5 = 0.055 µg/l; SG-9-5 = 0.056 µg/l; SG-10-5 = 0.053 µg/l; SG-14-5 = 0.038 µg/l; SG-22-5 = 0.040 µg/l; SG-36-5 = 0.058 µg/l.  
 Trichlorofluoromethane: SG-22-5 = 0.010 µg/l; SG-33-5 = 0.032 µg/l.  
 Dichlorodifluoromethane: SG-33-5 = 1.2 µg/l.
  - 5) Analyses performed in accordance with Los Angeles Regional Water Quality Control Board guidelines for active soil gas sampling.
  - 6) Data summarized from Erler & Kalinowski reports (Appendix C; EKI, 1998a).

Table 3. Summary of TCE and PCE Concentrations in Soil  
 5030 Firestone Boulevard  
 South Gate, California  
 Project #21025-02

Sample Number Depth (feet)	B1-5.5 5.5 mg/kg	B1-11 11 mg/kg	B1-20 20 mg/kg	B2-5.5 5.5 mg/kg	B2-10.5 10.5 mg/kg	B3-6 6 mg/kg	B3-11 11 mg/kg	B4-6 6 mg/kg	B4-16 16 mg/kg	B4-20.5 20.5 mg/kg	B5-6 6 mg/kg	B5-10.5 10.5 mg/kg	B6-6 6 mg/kg	B6-10.5 10.5 mg/kg	B7-6 6 mg/kg	B7-11 11 mg/kg	B8-6 6 mg/kg	B8-11 11 mg/kg	B9-5.5 5.5 mg/kg	B9-10.5 10.5 mg/kg	B10-6 6 mg/kg	B10-11 11 mg/kg	B11-6 6 mg/kg	
PCE - tetrachloroethane	0.074	0.13	0.035	0.018	0.045	0.042	0.12	0.076	2.2	140	0.025	0.065	0.13	0.019	0.055	< 0.015	0.0029	0.041	0.0036	0.022	0.027	< 0.015	0.061	
TCE - trichloroethene	0.024	0.037	0.04	0.0073	< 0.015	0.01	0.034	0.021	0.092	270	0.0053	0.19	0.031	0.025	0.019	< 0.015	< 0.0025	0.05	< 0.0025	0.041	0.0064	0.027	0.036	0.016
TCE/PCE	0.32	0.28	1.14	0.41	0.33	0.24	0.28	0.28	0.04	1.93	0.21	2.92	0.24	1.32	0.35	1	0.86	1.22	0.69	1.86	0.24	2.4	0.26	

Sample Number Depth (feet)	B11-11 11 mg/kg	B12-6 6 mg/kg	B13-6 6 mg/kg	B15-10 10 mg/kg	B15-16 16 mg/kg	B15-20.5 20.5 mg/kg	B15-26.5 26.5 mg/kg	B15-31 31 mg/kg	B15-35.5 35.5 mg/kg	B15-40 40 mg/kg	B16-6 6 mg/kg	B16-11 11 mg/kg	B16-16 16 mg/kg	B16-21 21 mg/kg	B16-26 26 mg/kg	B16-31 31 mg/kg	B16-35.5 35.5 mg/kg	B16-41 41 mg/kg	B16-46 46 mg/kg	B16-51 51 mg/kg	B17-6 6 mg/kg	B17-11 11 mg/kg	B17-16 16 mg/kg	
PCE - tetrachloroethane	< 0.014	< 0.0025	< 0.0025	< 0.005	< 0.005	< 0.005	< 0.005	0.054	0.041	0.026	< 0.005	< 0.005	< 0.005	0.027	0.041	0.047	0.027	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
TCE - trichloroethene	0.035	< 0.0025	< 0.0025	< 0.005	< 0.005	< 0.005	< 0.005	0.38	0.52	0.14	1.2	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.12	0.11	0.19	0.11	0.41	0.39	1.3	
TCE/PCE	2.5	1	1	1	1	1	7.04	12.68	5.38	240	1	1	1	0.19	0.12	0.11	0.19	1	82	78	260	1	1	1

Sample Number Depth (feet)	B17-21 21 mg/kg	B17-26 26 mg/kg	B17-31.5 31.5 mg/kg	B17-36 36 mg/kg	B17-41 41 mg/kg	B17-46 46 mg/kg	B17-53.5 53.5 mg/kg	B18-11 11 mg/kg	B18-16 16 mg/kg	B18-21 21 mg/kg	B18-27 27 mg/kg	B18-31 31 mg/kg	B18-36 36 mg/kg	B18-41 41 mg/kg	B18-46 46 mg/kg	B19-16 16 mg/kg	B19-21 21 mg/kg	B19-26 26 mg/kg	B19-31 31 mg/kg	B19-36.5 36.5 mg/kg	B19-41 41 mg/kg	B19-46 46 mg/kg
PCE - tetrachloroethane	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.4	0.37	0.66	0.093	0.14	< 0.005	0.091	0.18	0.42	0.28	0.28	0.25	< 0.005	0.16	0.18
TCE - trichloroethene	< 0.005	0.048	0.056	1.4	1.2	1.6	1.4	0.11	0.61	16	0.75	2	0.056	2.3	8.7	0.2	1.8	1.5	1.2	0.11	4	4.3
TCE/PCE	1	9.6	11.2	280	240	320	280	0.28	1.65	24.24	8.06	14.29	11.2	25.27	48.33	0.48	6.43	5.36	4.8	22	25	23.89

Sample Number Depth (feet)	MW1-10.5 10.5 mg/kg	MW1-20.5 20.5 mg/kg	MW1-30.5 30.5 mg/kg	MW2-10.5 10.5 mg/kg	MW2-20.5 20.5 mg/kg	MW2-30.5 30.5 mg/kg	MW3-11 11 mg/kg	MW3-20.5 20.5 mg/kg	MW3-30.5 30.5 mg/kg	MW5-21 21 mg/kg	MW5-31 31 mg/kg	MW5-41 41 mg/kg
PCE - tetrachloroethane	0.021	0.023	0.011	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.0025	< 0.0025	< 0.050
TCE - trichloroethene	0.018	0.062	0.06	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	0.022	0.011	0.55
TCE/PCE	0.86	2.7	5.45	1	1	1	1	1	1	8.8	4.4	11

- NOTES:
- 1) Analyses performed by Orange Coast Analytical using EPA methods 8240 and 8010.
  - 2) Samples from borings B1 through B13 collected on October 28, 1997. Samples from borings B15 through B19 collected December 1 and 2, 1997 (EKI, 1998a).
  - 3) Samples from MW-1 through MW-3 collected in June 1998 (EKI, 1998b).
  - 4) Samples from MW-5 collected in January 1999 (EKI, 1999a).
  - 5) Data summarized from Erler & Kalinowski reports (EKI, 1998a, 1998b, 1999a).

**Table 4. Summary of VOC Concentrations in Groundwater - Monitoring Well  
5030 Firestone Boulevard  
South Gate, California  
Project #21025-02**

Well ID Sample #	MW-1												MW-2											
	MW-1-0304	MW-1-0304	MW-1-0520	MW-1	MW-1	MW-1	MW-1	MW-1-A*	MW-1	MW-1	MW-1	MW-2-0304	MW-2-0520	MW-2	MW-2	MW-2	MW-2	MW-2-A*	MW-2	MW-2	MW-2	MW-2	MW-2-A*	MW-2
	Date	03/04/98 µg/L	DUP 03/04/98 µg/L	05/20/98 µg/L	11/05/98 µg/L	02/03/99 µg/L	06/01/99 µg/L	09/01/99 µg/L	12/08/99 µg/L	12/08/99 µg/L	03/15/00 µg/L	06/20/00 µg/L	09/07/00 µg/L	12/05/00 µg/L	03/04/98 µg/L	05/20/98 µg/L	11/05/98 µg/L	02/03/99 µg/L	06/01/99 µg/L	09/01/99 µg/L	12/08/99 µg/L	12/08/99 µg/L	09/01/99 µg/L	12/08/99 µg/L
Benzene	< 100	< 100	< 125	< 125	< 125	< 100	< 100	< 250	< 100	< 100	< 100	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Toluene	< 100	< 100	< 125	< 125	< 125	< 100	< 100	140	< 250	110	< 100	< 100	< 100	13	14	13	13	12	16	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethane (1,1-DCA)	< 100	< 100	< 125	< 125	< 125	< 100	< 100	220	< 250	150	160	< 100	< 100	34	38	36	36	34	49	< 10	< 10	< 10	< 10	< 10
1,1-Dichloroethene (1,1-DCE)	220	210	160	140	130	140	220	< 250	< 100	< 100	< 100	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
1,2-Dichloroethane (1,2-DCA)	< 100	< 100	< 125	< 125	< 125	< 100	< 100	200	< 250	200	230	< 100	< 100	65	68	68	70	68	72	57	63	74	< 10	< 10
cis-1,2-Dichloroethene (c-1,2-DCE)	130	150	130	160	160	190	200	< 250	< 100	< 100	< 100	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
trans-1,2-Dichloroethene (t-1,2-DCE)	< 100	< 100	< 125	< 125	< 125	< 100	< 100	250	< 250	160	150	< 100	< 100	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
Tetrachloroethene (PCE)	140	160	< 125	170	160	160	190	< 250	30,000	33,000	30,000	24,000	21,000	3,000	2,700	3,000	3,200	3,200	2,800	3,100	2,400	2,600	2,800	
Trichloroethene (TCE)	24,000	25,000	24,000	28,000	27,000	28,000	32,000	30,000	33,000	30,000	24,000	21,000	3,000	2,700	3,000	3,200	3,200	3,200	3,200	310	185	260	280	
TCE/PCE	171	156	192	165	169	175	168	120	206	200	240	210	300	270	300	320	320	320	320	280	310	185	260	280
Well ID Sample #	MW-3												MW-4											
	MW-2	MW-2	MW-2	MW-3-0304	W-3-052	MW-3	MW-3	MW-3	MW-3	MW-3-A*	MW-3	MW-4	MW-4	MW-4	MW-4									
	Date	06/20/00 µg/L	09/07/00 µg/L	12/05/00 µg/L	03/04/98 µg/L	05/20/98 µg/L	11/05/98 µg/L	02/03/99 µg/L	06/01/99 µg/L	09/01/99 µg/L	12/08/99 µg/L	12/08/99 µg/L	03/15/00 µg/L	06/20/00 µg/L	09/07/00 µg/L	06/20/00 µg/L	09/07/00 µg/L	06/20/00 µg/L	09/07/00 µg/L	11/05/98 µg/L	02/03/99 µg/L	06/01/99 µg/L	09/01/99 µg/L	
Benzene	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Toluene	< 10	< 10	< 10	13	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
1,1-Dichloroethane (1,1-DCA)	< 10	< 10	< 10	14	13	11	11	11	13	< 13	13	11	10	11	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
1,1-Dichloroethene (1,1-DCE)	< 10	< 10	< 10	82	58	66	64	66	80	< 13	55	61	< 10	< 10	< 10	< 10	< 10	< 10	< 0.5	2.1	65	< 0.5	< 0.5	
1,2-Dichloroethane (1,2-DCA)	< 10	< 10	< 10	< 10	200	230	240	220	270	220	240	300	170	200	160	160	200	210	0.67	< 0.5	1.1	< 0.5	< 0.5	
cis-1,2-Dichloroethene (c-1,2-DCE)	46	42	42	200	230	240	220	270	220	< 13	19	20	14	16	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
trans-1,2-Dichloroethene (t-1,2-DCE)	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	
Tetrachloroethene (PCE)	< 10	< 10	< 10	< 10	2,800	2,800	2,300	2,000	1,900	2,600	2,500	2,900	3,100	1,900	2,100	1,700	1,700	2,400	2,500	6.7	< 0.5	0.9	< 0.5	< 0.5
Trichloroethene (TCE)	2,000	1,800	2,300	2,800	280	230	200	190	260	192	290	310	190	210	170	170	240	250	13	0	2	0	0	
Well ID Sample #	MW-4												MW-5											
	MW-4	MW-4	MW-4	MW-4	MW-5	MW-5	MW-5	MW-5	MW-5	MW-5-A*	MW-5													
	Date	03/15/00 µg/L	06/20/00 µg/L	09/07/00 µg/L	12/05/00 µg/L	11/05/98 µg/L	02/03/99 µg/L	06/01/99 µg/L	09/01/99 µg/L	12/08/99 µg/L	12/08/99 µg/L	03/15/00 µg/L	12/08/99 µg/L	12/08/99 µg/L	03/15/00 µg/L	12/08/99 µg/L	12/08/99 µg/L	03/15/00 µg/L	12/08/99 µg/L	06/20/00 µg/L	09/07/00 µg/L	12/05/00 µg/L		
Benzene	77	< 0.5	< 0.5	< 0.5	< 0.5	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 10	< 10	
Toluene	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 10	< 10	
1,1-Dichloroethane (1,1-DCA)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	42	40	49	45	52	56	40	69	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 10	< 10	
1,1-Dichloroethene (1,1-DCE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 10	< 10	
1,2-Dichloroethane (1,2-DCA)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	380	360	420	370	420	430	440	390	410	360	410	440	450	350	450	350	280	190	
cis-1,2-Dichloroethene (c-1,2-DCE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	30	29	35	31	36	35	45	45	< 50	25	< 50	26	< 50	< 50	< 25	< 10	< 10	< 10	
trans-1,2-Dichloroethene (t-1,2-DCE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 25	< 25	< 25	< 25	< 25	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 50	< 25	< 10	< 10	
Tetrachloroethene (PCE)	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	5,000	4,800	5,100	4,500	5,500	5,300	6,000	5,100	5,300	5,000	5,300	5,500	5,800	4,400	3,700	4,700			
Trichloroethene (TCE)	0.68	< 0.5	< 0.5	< 0.5	< 0.5	200	192	204	180	220	212	220	240	102	212	100	212	110	116	176	370	470		
TCE/PCE	1	1	1	1	200	192	204	180	220	212	220	240	102	212	100	212	110	116	176	370	470			

NOTE: 1) Analyses performed by Orange Coast Analytical, Inc., in Tustin, CA, using EPA Method 8260.

**1) Analyses performed by Orange Coast Analytical, Inc., in Tustin, CA, using:**

2) < indicates that the analyte was not detected at a concentration above the indicated MCL.

3) \* = samples collected on December 8, 1999, were initially analyzed by the method detection limit.

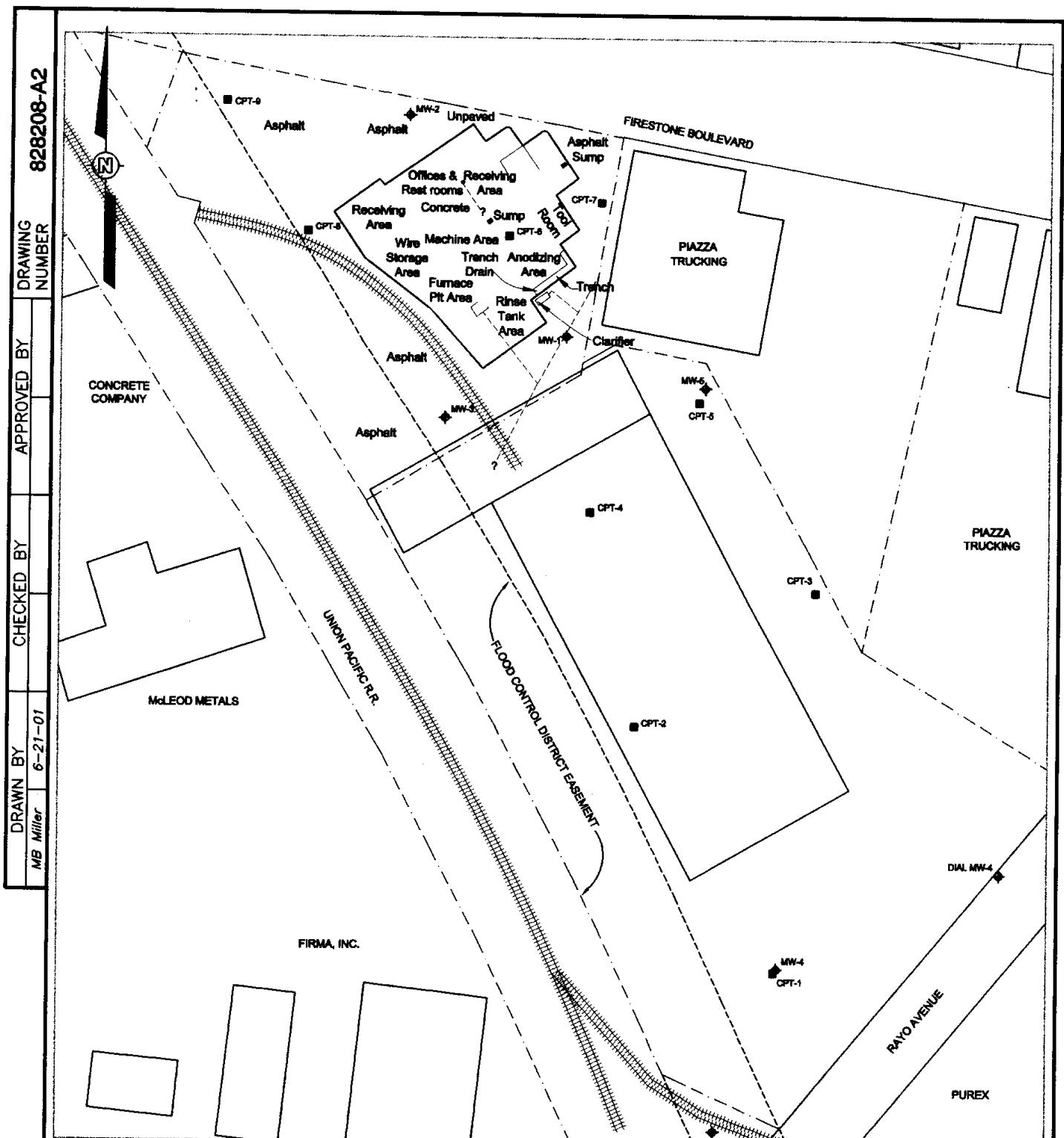
4) Bolding represents detections above the method detection limit.

5) Data summarized from Erler & Kalinowski reports (EKI, 1998b, 1999a, 2000e)

Table 5. Summary of VOC Concentrations in Groundwater - PIPP at CPT Locations  
 5030 Firestone Boulevard  
 South Gate, California  
 Project #21025-02

	CPT-1 10/01/98 55' BGS µg/L	CPT-1 10/01/98 95' BGS µg/L	CPT-2 10/01/98 55' BGS µg/L	CPT-3 10/01/98 55' BGS µg/L	CPT-4A 10/01/98 55' BGS µg/L	CPT-4B 10/01/98 55' BGS µg/L	CPT-5 10/01/98 55' BGS µg/L	CPT-6 10/02/98 55' BGS µg/L	CPT-7 10/02/98 55' BGS µg/L	CPT-8 10/02/98 55' BGS µg/L	CPT-9 10/02/98 55' BGS µg/L
Acetone	170	8.1	300	170	95	80	480	< 400	< 500	16	490
Methyl ethyl ketone (MEK)	4.6	< 1	3.5	2.7	2.2	8.4	< 25	< 200	< 250	< 1	7.7
Benzene	1.6	< 0.5	< 1	0.58	< 1	< 1	< 13	< 100	< 125	< 0.5	< 1
Toluene	< 0.5	< 0.5	1.1	0.55	1.1	< 1	< 13	< 100	< 125	< 0.5	< 1
Xylenes	< 0.5	< 0.5	< 1	0.66	1.2	< 1	< 13	< 100	< 125	< 0.5	< 1
1,1-Dichloroethane (1,1-DCA)	< 0.5	< 0.5	< 1	< 0.5	1.2	1.1	< 13	240	160	1.4	< 1
1,2-Dichloroethane (1,2-DCA)	< 0.5	< 0.5	< 1	< 0.5	< 1	< 1	< 13	< 100	< 125	< 0.5	< 1
1,1-Dichloroethene (1,1-DCE)	< 0.5	< 0.5	< 1	< 0.5	4.1	3.4	< 13	< 100	< 125	6.7	< 1
cis-1,2-Dichloroethene (c-1,2-DCE)	< 0.5	< 0.5	< 1	2.6	11	10	110	130	190	11	< 1
trans-1,2,Dichloroethene (t-1,2-DCE)	< 0.5	< 0.5	< 1	< 0.5	< 1	< 1	< 13	< 100	< 125	1.3	< 1
Tetrachloroethene (PCE)	< 0.5	< 0.5	< 1	< 0.5	< 1	< 1	< 13	110	< 125	< 0.5	< 1
Trichloroethene (TCE)	< 0.5	< 0.5	1.6	6.3	220	200	3800	35000	27000	140	9.1
TCE/PCE	1	1	2	13	220	200	292	318	216	280	9

- NOTES:
- 1) Sample CPT-4B is a duplicate of CPT-4B.
  - 2) Chemical analyses were performed by Orange Coast Analytical, Inc. in Tustin, CA.
  - 3) California maximum contaminant levels (MCLs) are as reported in the Drinking Water Standards and Health Advisories Table by USEPA Region IX, dated June 1998.  
 "none" indicates that no MCL (California or federal) has been established.
  - 4) Bolding represents detections above the method detection limit.
  - 5) Data summarized from Erler & Kalinowski reports (EKI, 1998b).



### LEGEND

- ◆ MW-1 Groundwater Monitoring Well
- CPT-1 CPT/PIPP Groundwater Sample Location
- Sump
- - - Flood Control District Easement
- - - Property Line
- - - - Sewer (not confirmed)
- ==== Union Pacific Rail Road

NOTE: All locations are approximate.

REFERENCES: EKI, 1998a, Figure 2.  
EKI, 1999, Figure 2.

0 100 200 FEET

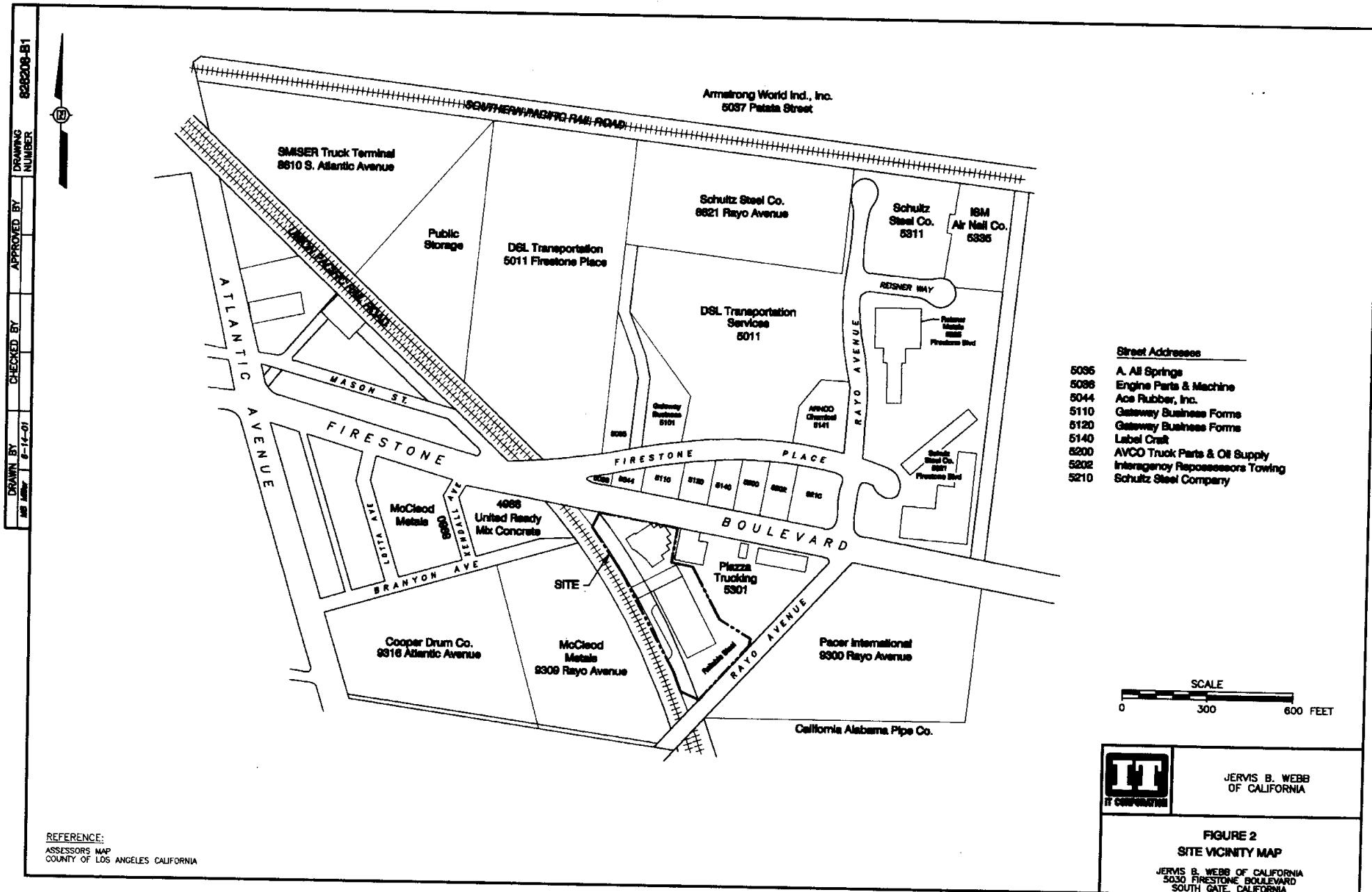


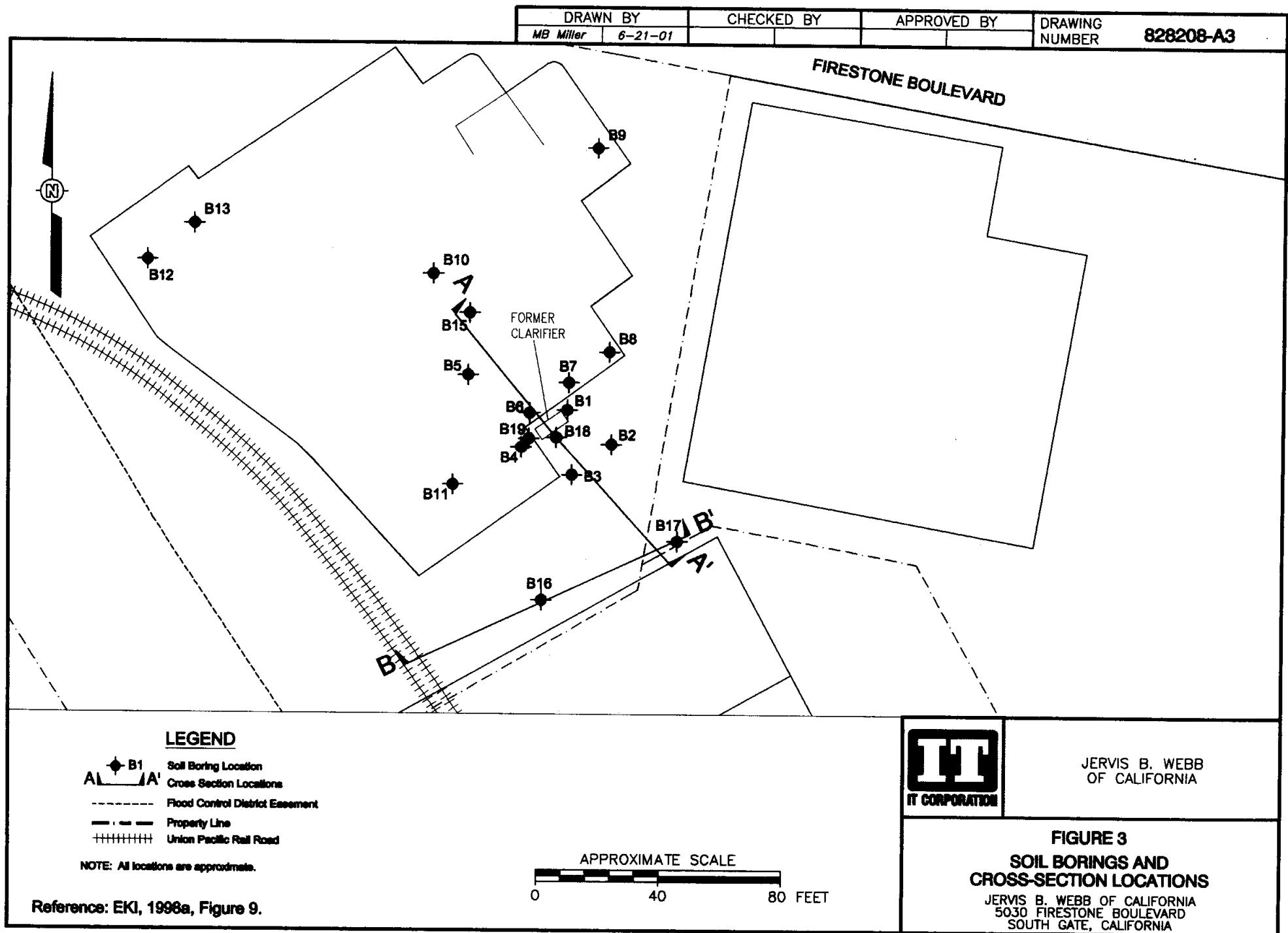
JERVIS B. WEBB  
OF CALIFORNIA

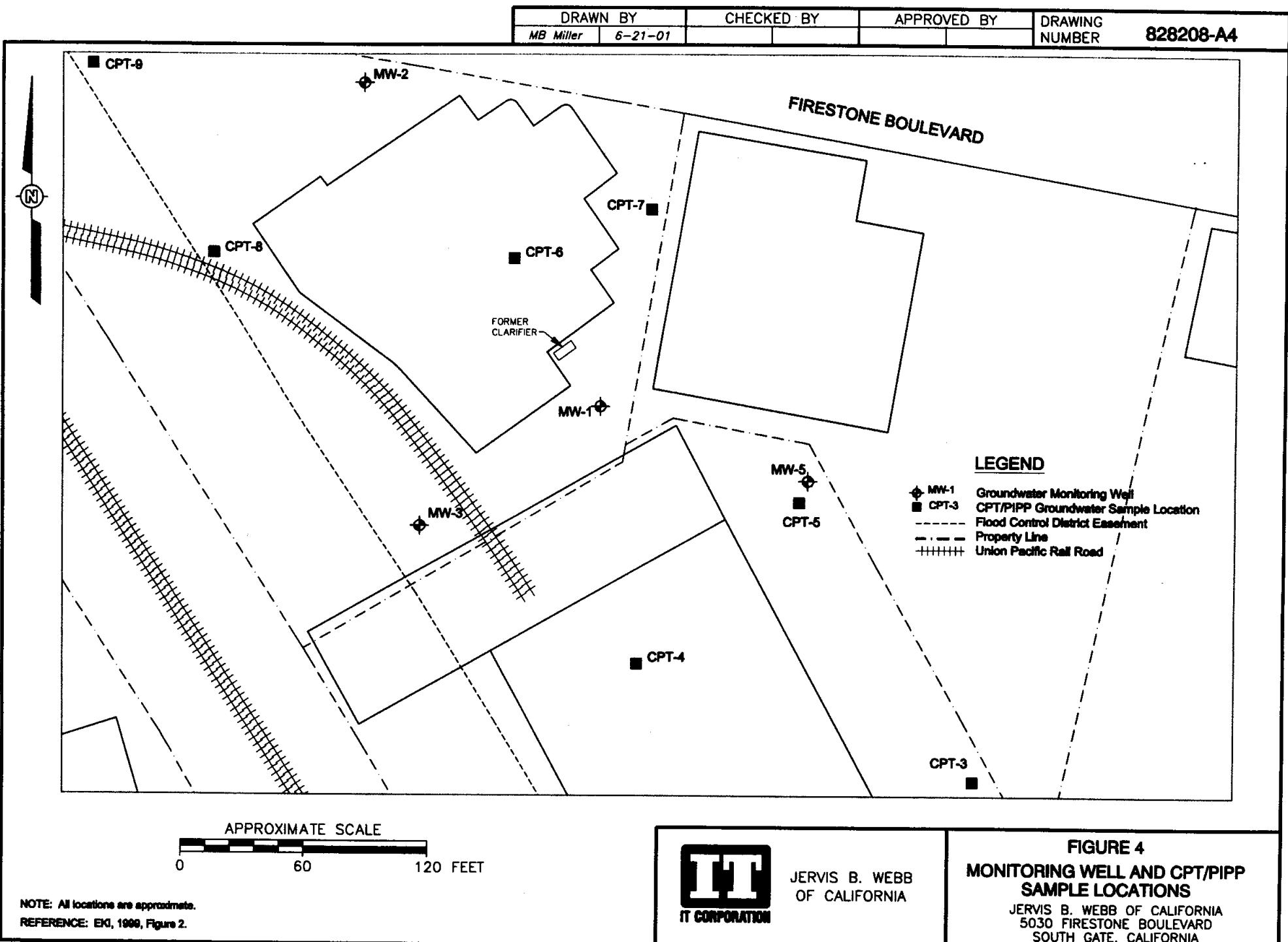
FIGURE 1  
PROPERTY LOCATION MAP

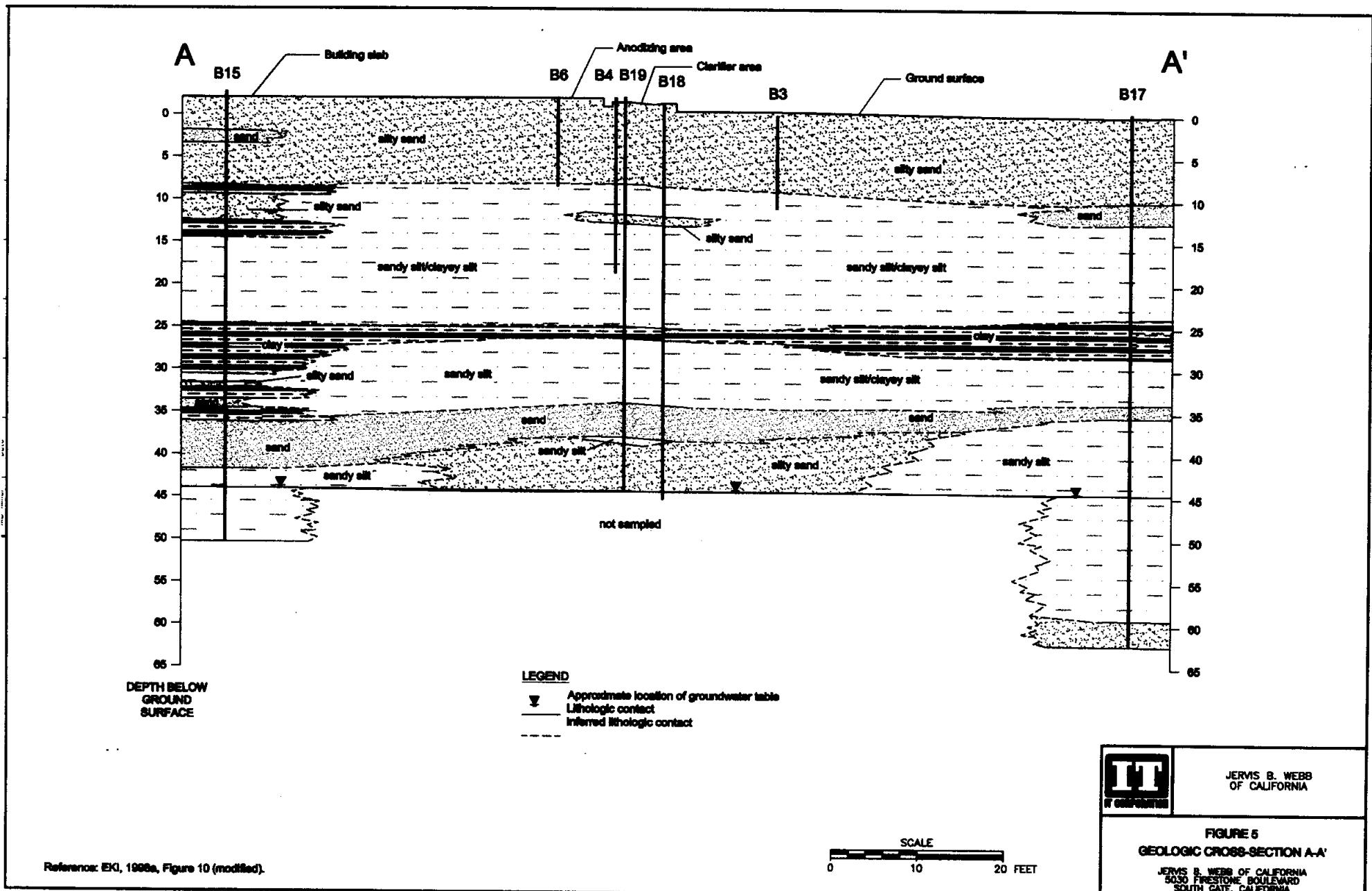
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

001616









References: EKI, 1998a, Figure 10 (modified).

SCALE  
0 10 20 FEET



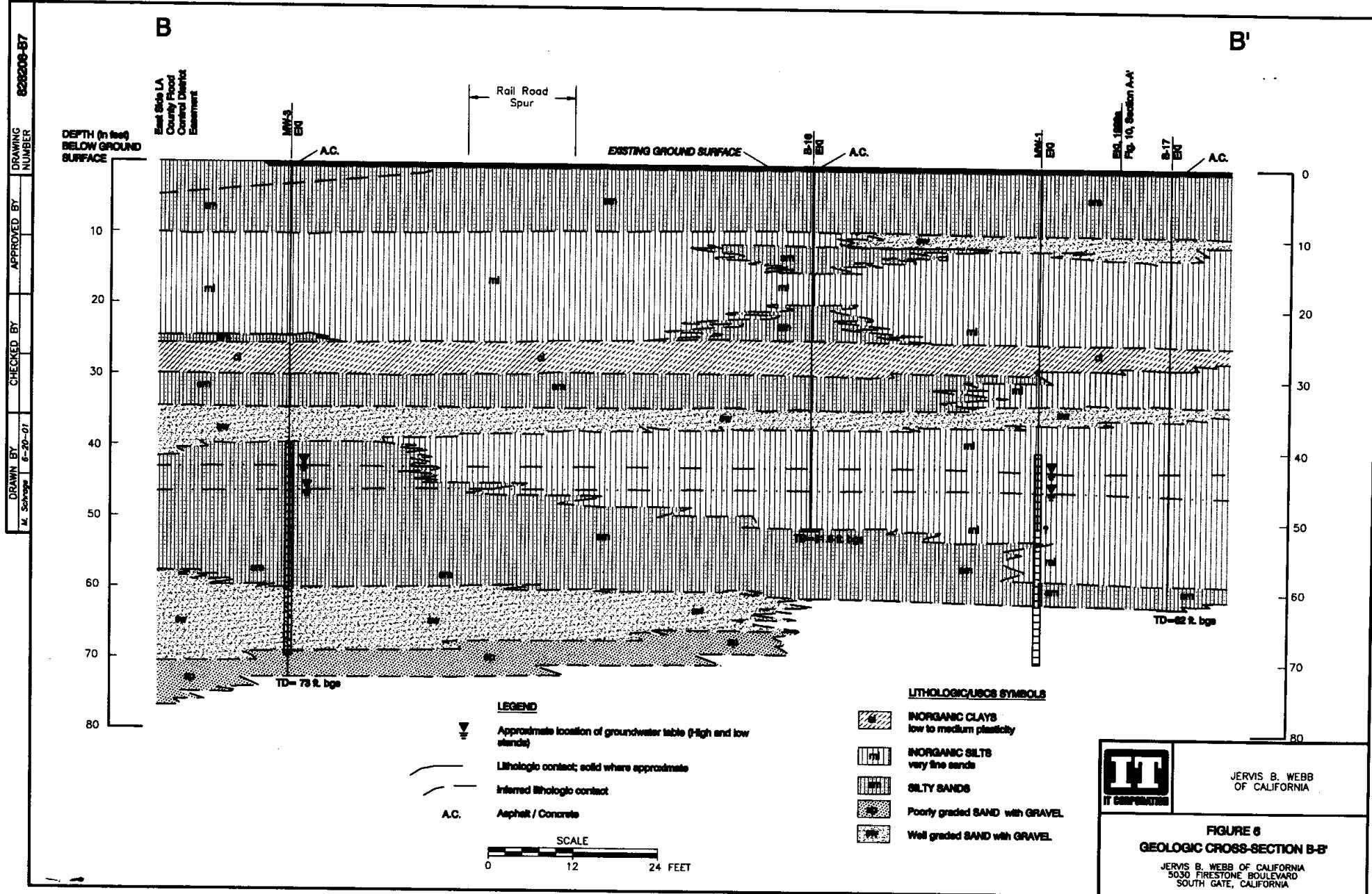
JERVIS B. WEBB  
OF CALIFORNIA

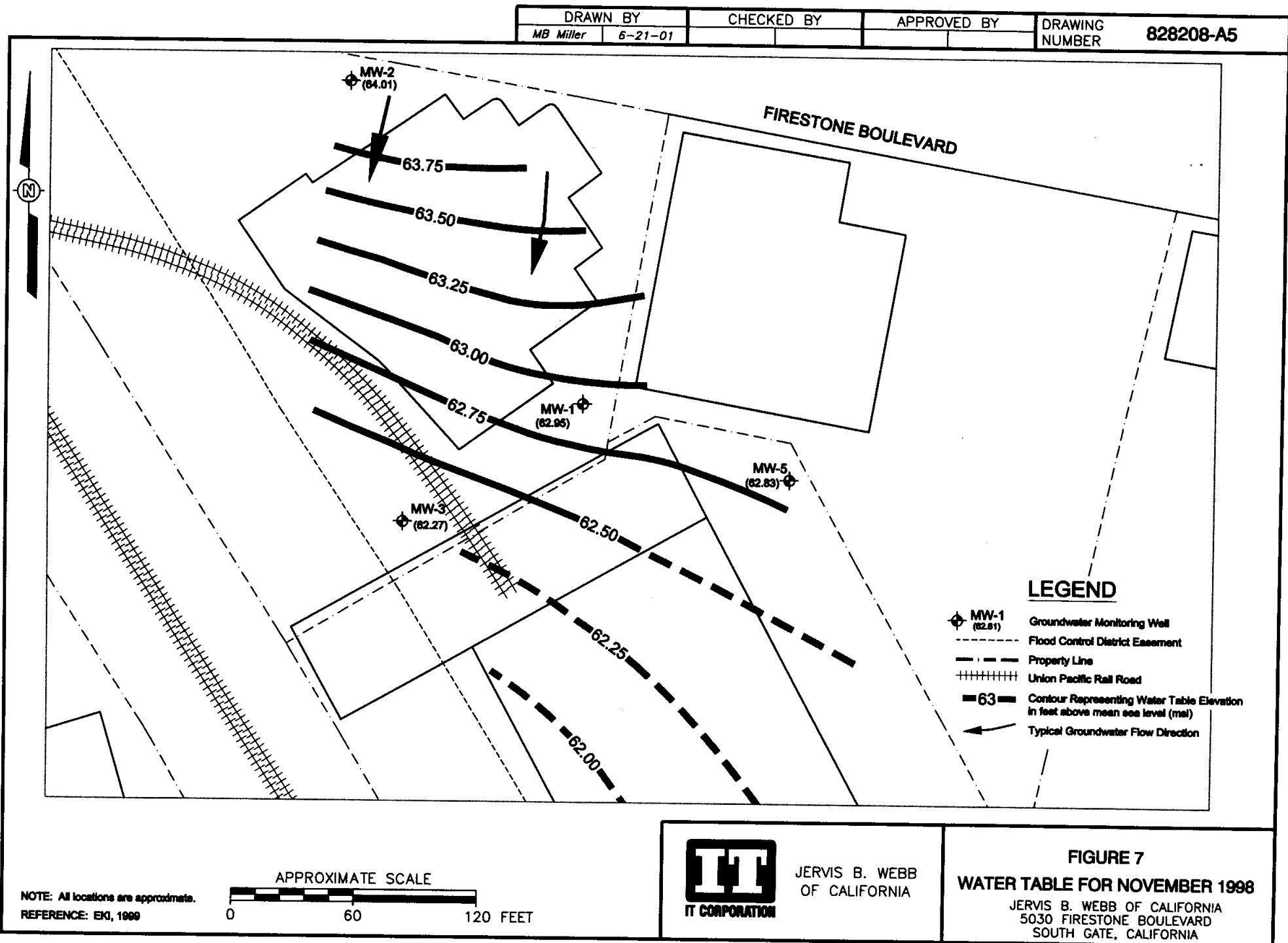
**FIGURE 5**  
**GEOLOGIC CROSS-SECTION A-A'**

JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

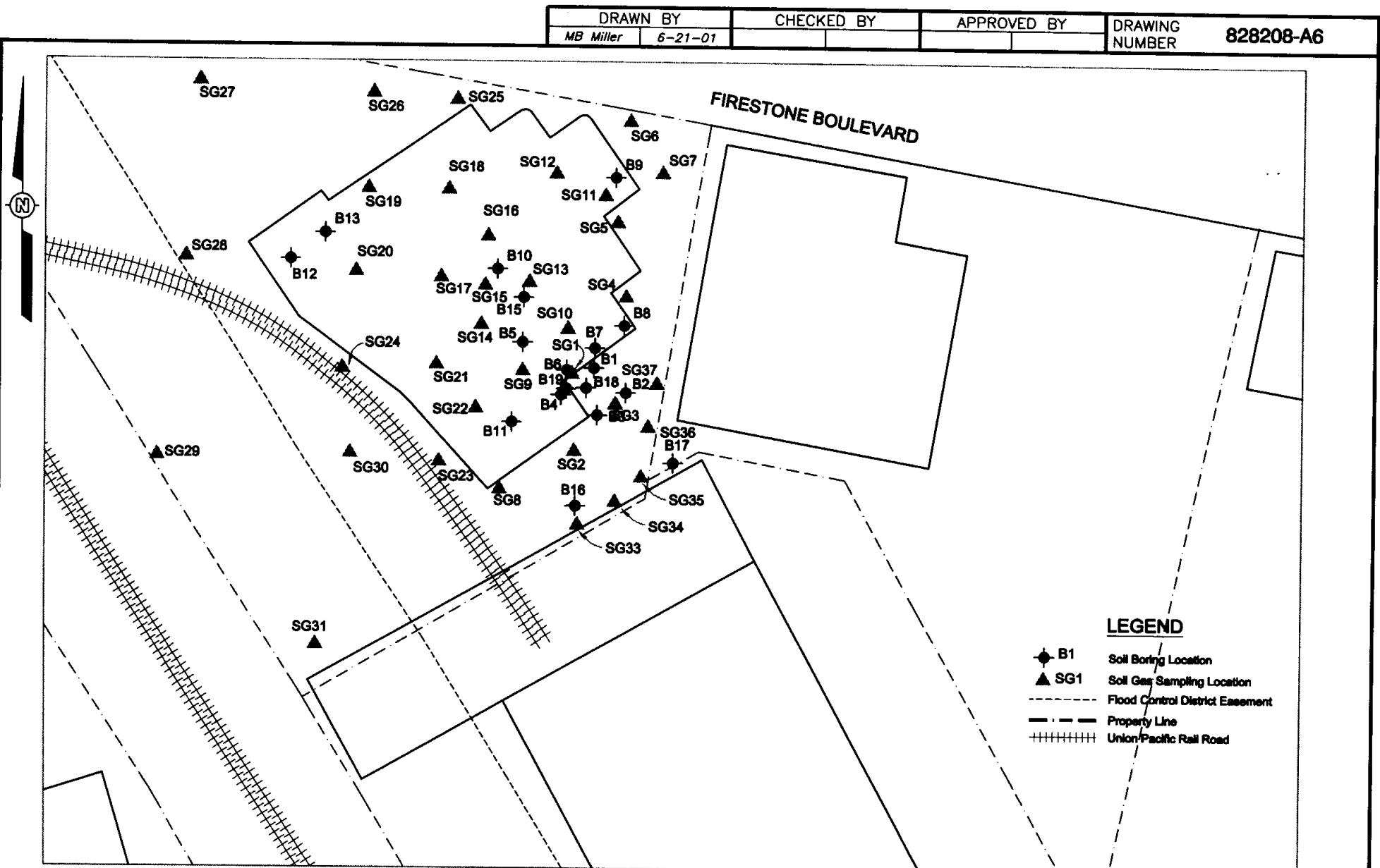
001620

001621



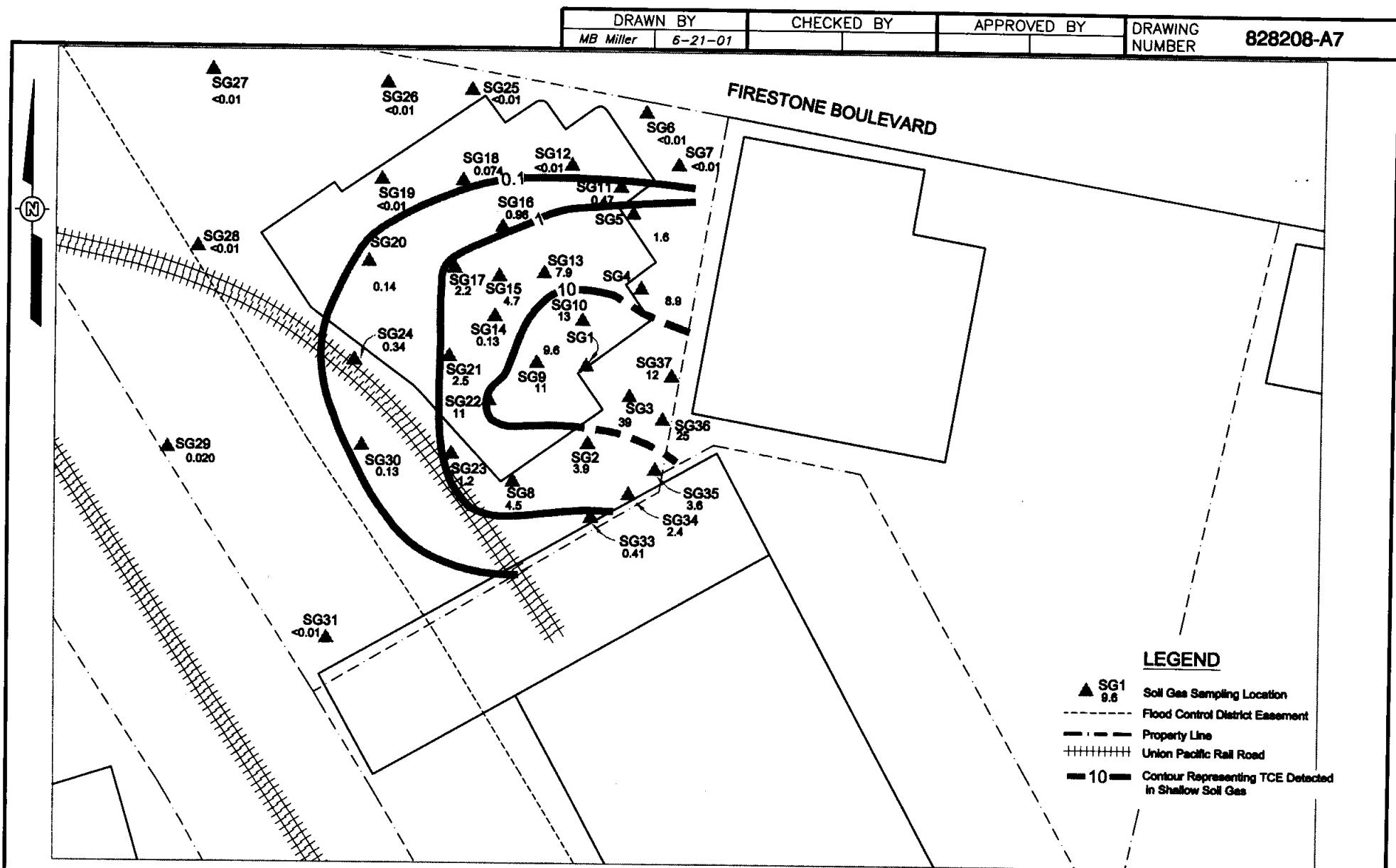


001622



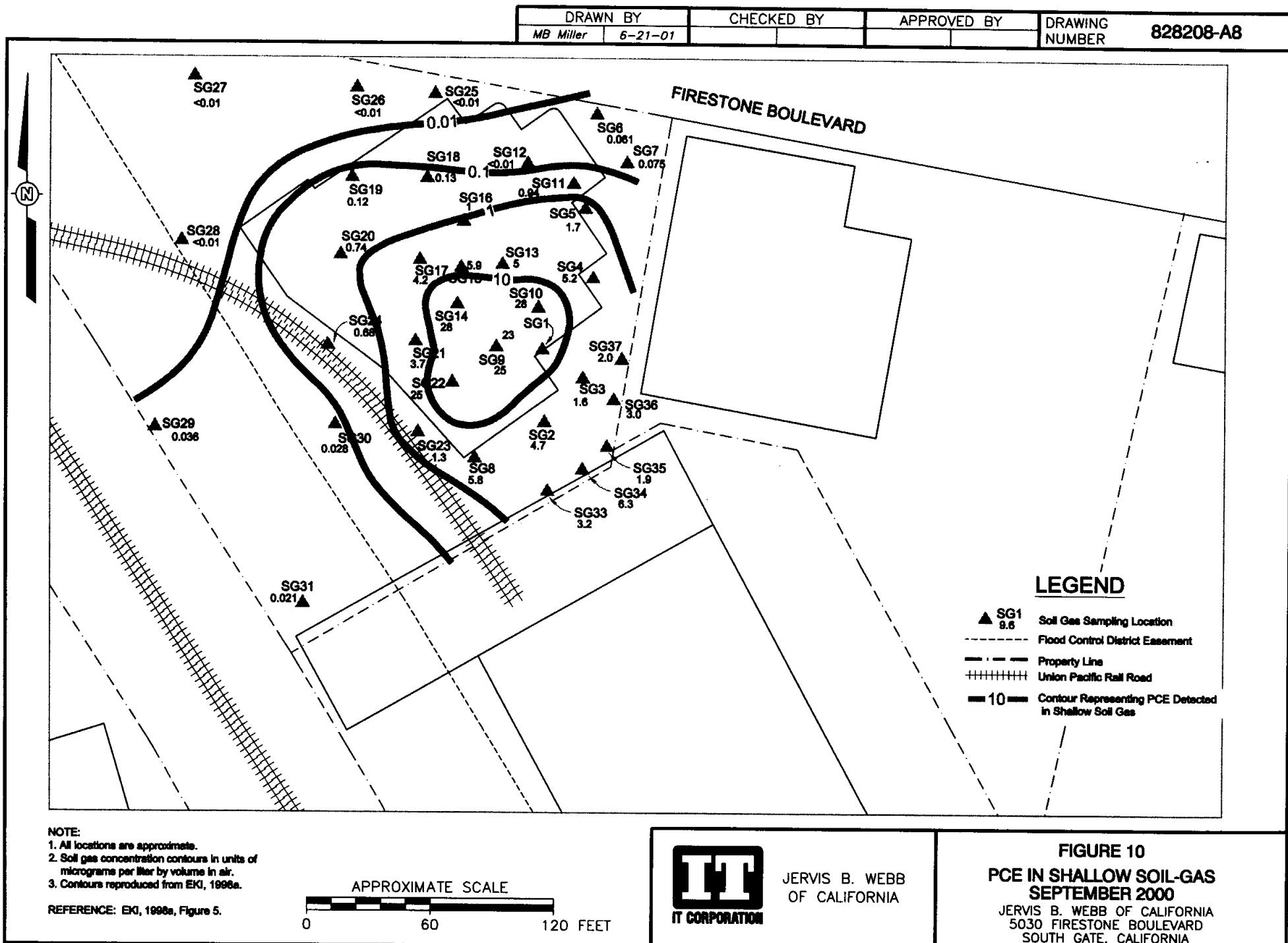
JERVIS B. WEBB  
OF CALIFORNIA

**FIGURE 8**  
**SOIL AND SOIL-GAS SAMPLING LOCATIONS**  
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA



JERVIS B. WEBB  
OF CALIFORNIA

**FIGURE 9**  
**TCE IN SHALLOW SOIL-GAS**  
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA



D-102030

NUMBER

D-2039

D-1000

D-1000

D-1000

D-1000

B9-4.5	8.5 Feet	TCE=0.007	PCB=0.016
B9-10.5	10.5 Feet	TCE=0.010	PCB=0.045

B9-9	9 Feet	TCE=0.010	PCB=0.048
B9-11	11 Feet	TCE=0.024	PCB=0.12

B9-6	6 Feet	TCE=0.021	PCB=0.070
B9-10	10 Feet	TCE=0.022	PCB=0.12
B9-12.5	12.5 Feet	TCE=0.070	PCB=0.19

B9-6	6 Feet	TCE=0.025	PCB=0.080
B9-10.5	10.5 Feet	TCE=0.18	PCB=0.080

B9-6	6 Feet	TCE=0.021	PCB=0.13
B9-10.5	10.5 Feet	TCE=0.025	PCB=0.019

B7-6	6 Feet	TCE=0.010	PCB=0.005
B7-11	11 Feet	TCE=0.010	PCB=0.005

B8-6	6 Feet	TCE=0.010	PCB=0.005
B8-11	11 Feet	TCE=0.010	PCB=0.005

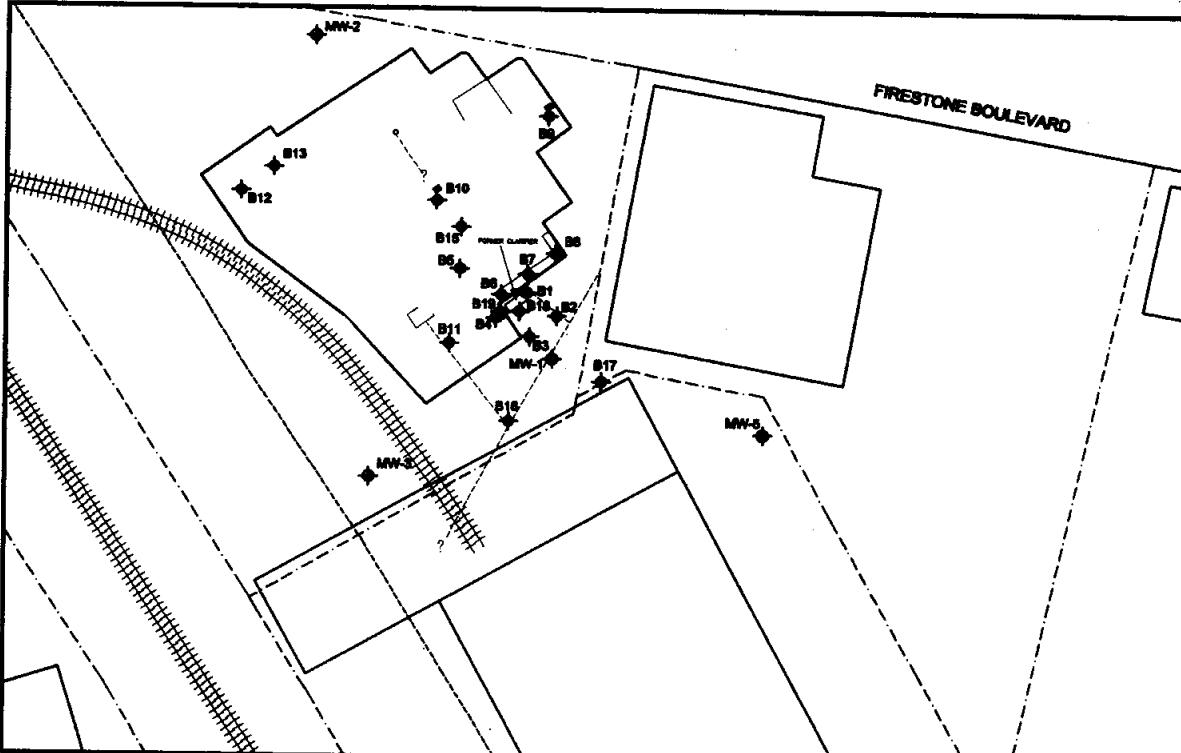
B9-6	6 Feet	TCE=0.010	PCB=0.004
B9-10.5	10.5 Feet	TCE=0.010	PCB=0.004

B10-6	6 Feet	TCE=0.000	PCB=0.007
B10-11	11 Feet	TCE=0.000	PCB=0.007

B11-6	6 Feet	TCE=0.010	PCB=0.001
B11-11	11 Feet	TCE=0.000	PCB=0.001

B12-6	6 Feet	TCE=0.000	PCB=0.000
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B13-6	6 Feet	TCE=0.000	PCB=0.000
-------	--------	-----------	-----------



## LEGEND

- ◆ MW-1 Groundwater Monitoring Well
- ◆ B1 Soil Sampling Location
- - - - - Flood Control District Boundary
- Property Line
- Union Pacific Rail Road

- NOTES:
1. All locations are approximate.
  2. PCB = polychlorinated biphenyls.
  3. TCE = trichloroethylene.
  4. ND = not detected above method detection limit.
  5. Soil concentrations reported in mg/kg.
  6. Sample depths reported in feet below ground surface.

APPROXIMATE SCALE  
0 60 120 FEET

B16-10	10 Feet	TCE=ND	PCB=ND
B16-16	16 Feet	TCE=ND	PCB=ND
B16-22	22 Feet	TCE=ND	PCB=0.027
B16-28	28 Feet	TCE=ND	PCB=0.041
B16-34	34 Feet	TCE=0.030	PCB=0.004
B16-40	40 Feet	TCE=1.2	PCB=ND
B16-46	46 Feet	TCE=1.3	PCB=ND

B16-6	6 Feet	TCE=ND	PCB=ND
B16-11	10 Feet	TCE=ND	PCB=ND
B16-17	16 Feet	TCE=ND	PCB=ND
B16-23	21 Feet	TCE=ND	PCB=0.041
B16-29	27 Feet	TCE=ND	PCB=0.047
B16-35	33 Feet	TCE=ND	PCB=0.057
B16-41	40 Feet	TCE=0.41	PCB=ND
B16-47	46 Feet	TCE=0.28	PCB=ND
B16-53	51 Feet	TCE=1.3	PCB=ND

B17-6	6 Feet	TCE=ND	PCB=ND
B17-11	11 Feet	TCE=ND	PCB=ND
B17-16	16 Feet	TCE=ND	PCB=ND
B17-21	21 Feet	TCE=ND	PCB=ND
B17-26	26 Feet	TCE=ND	PCB=ND
B17-31	31.5 Feet	TCE=0.048	PCB=ND
B17-37	38 Feet	TCE=1.4	PCB=ND
B17-41	41 Feet	TCE=1.2	PCB=ND
B17-46	46 Feet	TCE=1.8	PCB=ND
B17-52	52.5 Feet	TCE=1.4	PCB=ND

B18-11	11 Feet	TCE=0.11	PCB=0.40
B18-16	16 Feet	TCE=0.01	PCB=0.37
B18-21	21 Feet	TCE=0.18	PCB=0.65
B18-27	27 Feet	TCE=0.78	PCB=0.008
B18-31	31 Feet	TCE=0.20	PCB=0.14
B18-36	36 Feet	TCE=0.88	PCB=ND
B18-41	41 Feet	TCE=2.3	PCB=0.001
B18-46	46 Feet	TCE=0.7	PCB=0.16

B19-10	10 Feet	TCE=0.20	PCB=0.42
B19-21	21 Feet	TCE=1.8	PCB=0.38
B19-26	26 Feet	TCE=1.5	PCB=0.28
B19-31	31 Feet	TCE=1.2	PCB=0.28
B19-36.5	36.5 Feet	TCE=1.11	PCB=ND
B19-41	41 Feet	TCE=4.0	PCB=0.10
B19-46	46 Feet	TCE=4.3	PCB=0.10

JERVIS B. WEBB  
OF CALIFORNIA

FIGURE 11  
PCE AND TCE IN SOIL  
JERVIS B. WEBB OF CALIFORNIA  
5000 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

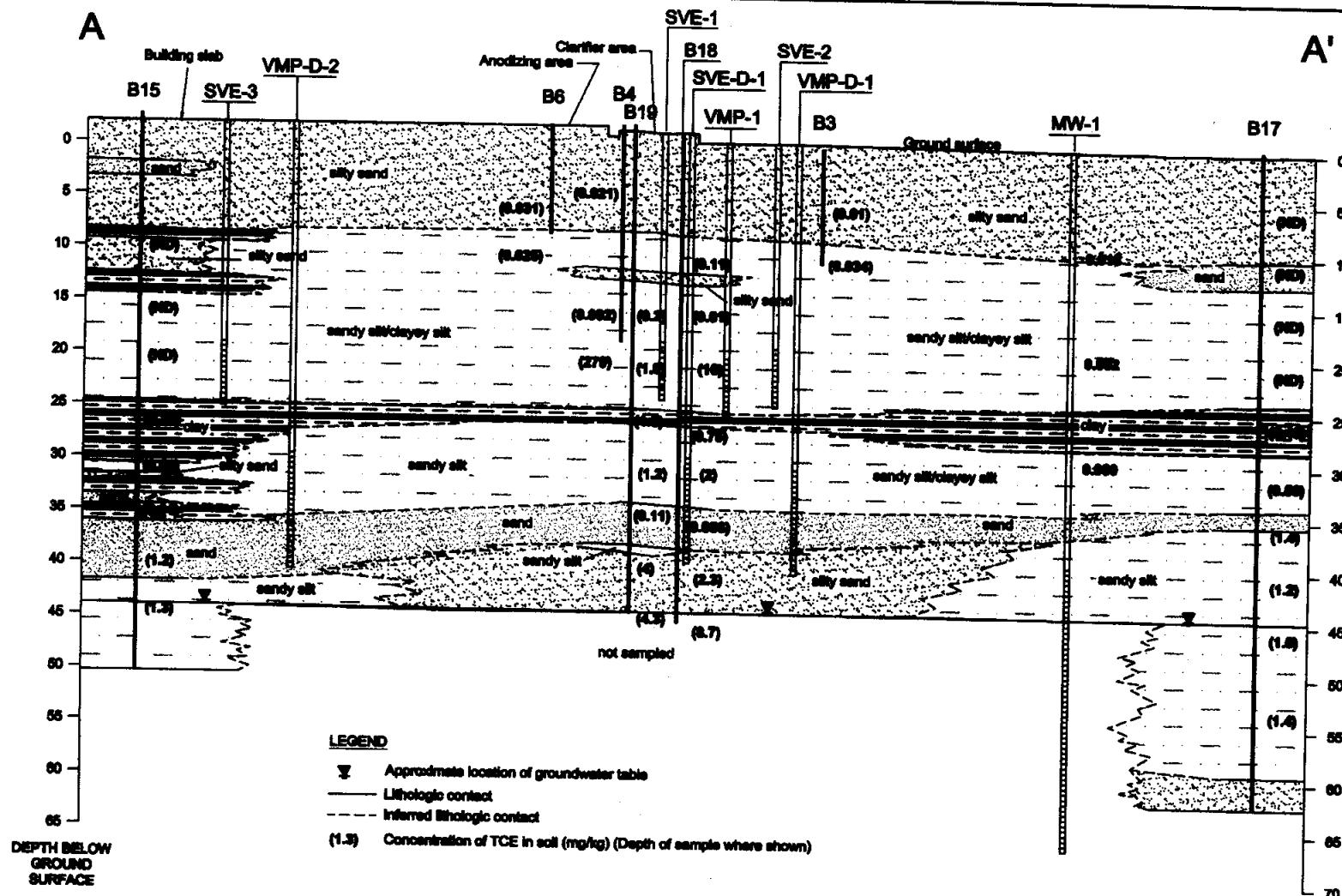
REFERENCES:  
1. EKI, 1988a, Figures 7 & 8.  
(Samples Designated B9 Through B10 Collected During Phase II Soil Investigation).2. EKI, 1988b, Table 2.  
(Samples Designated MW-1 Through MW-4 Collected During Phase II Groundwater Investigation).3. EKI, 1988c, Table 2.  
(Samples Designated MW-5 Collected During Additional Groundwater Investigation).

Reference: EKI, 1988a, Figure 10 (modified).

001626

A

A'



Reference: EKI, 1998a, Figure 10 (modified).

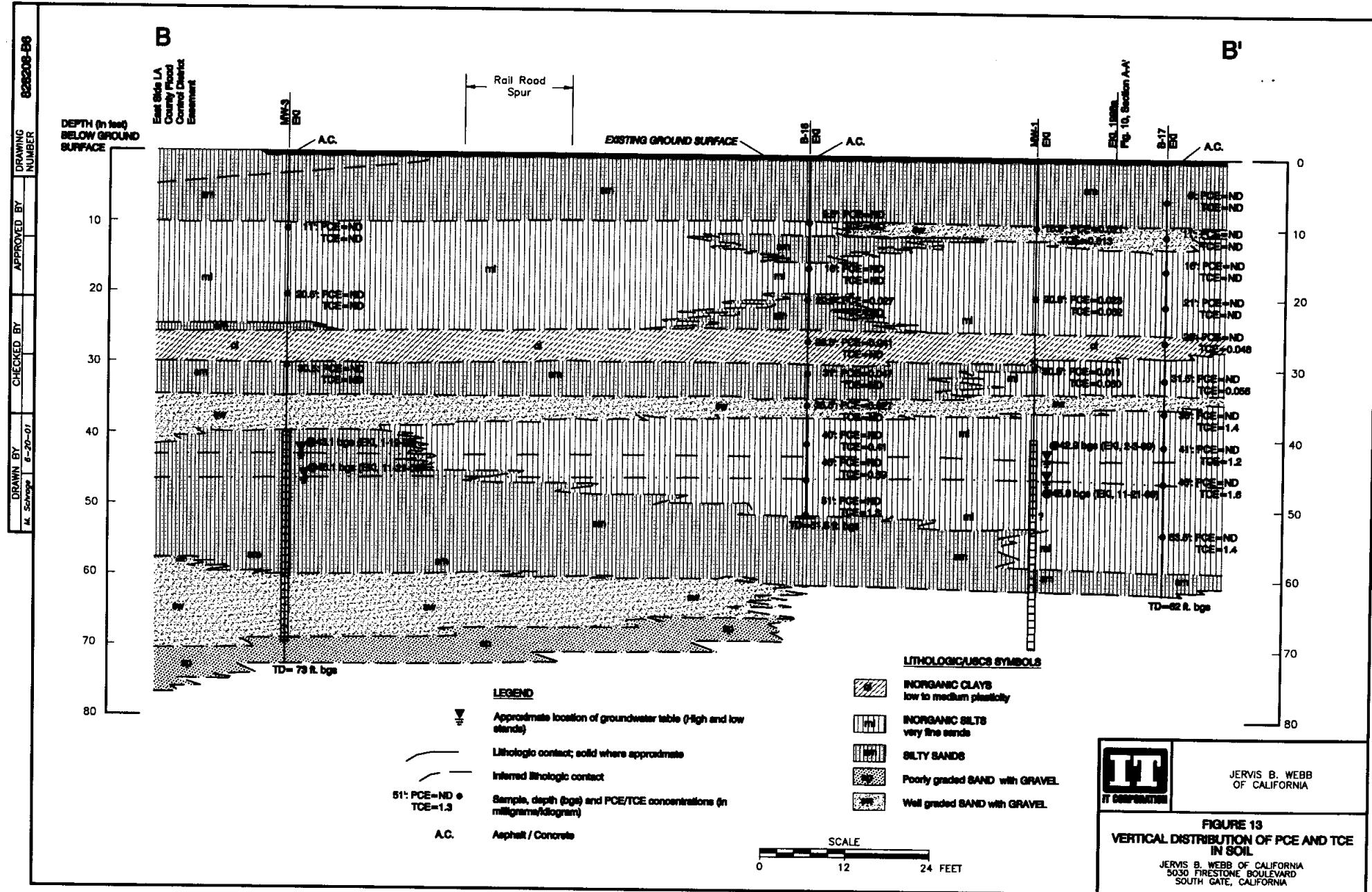


JERVIS B. WEBB  
OF CALIFORNIA

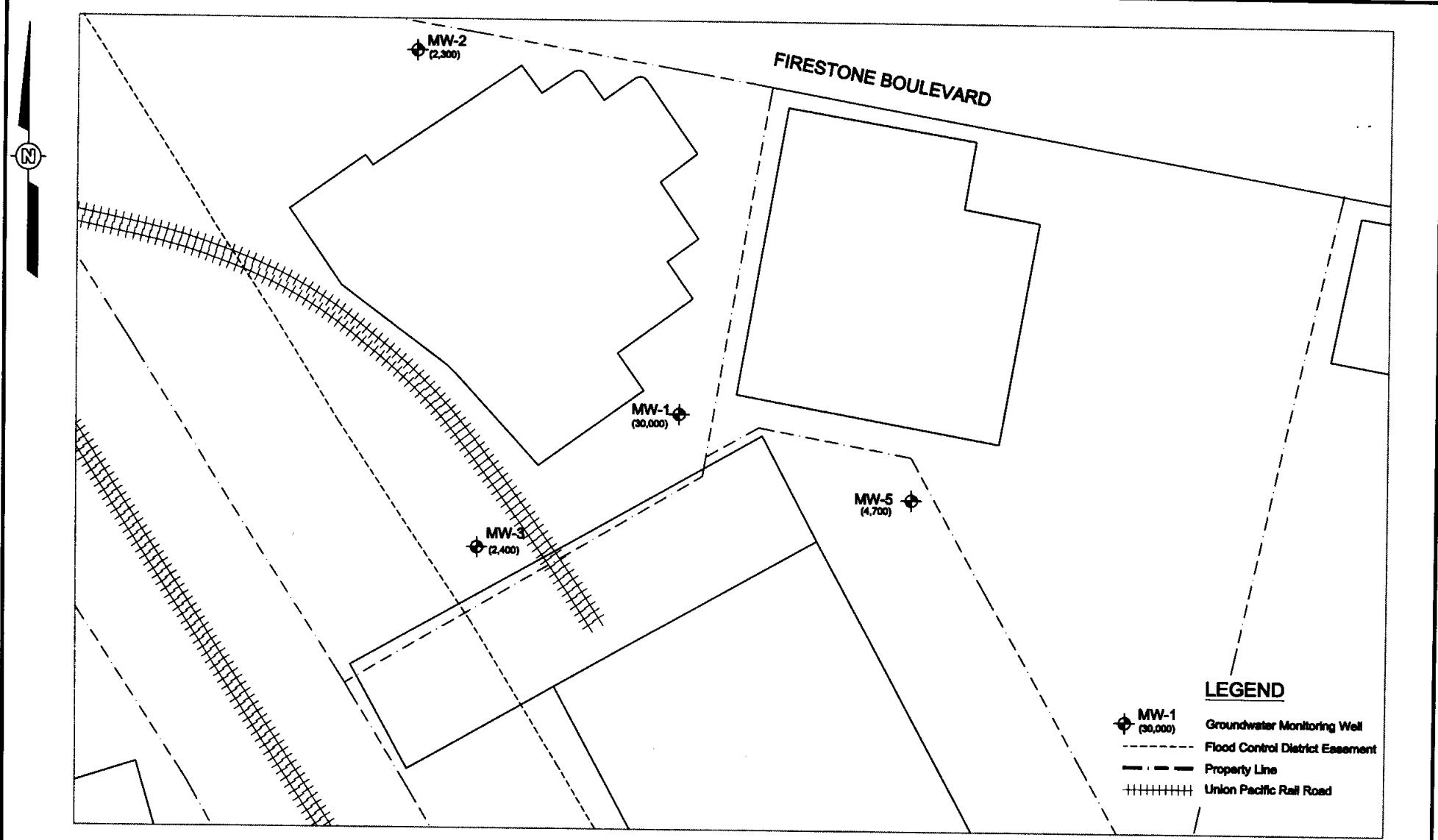
FIGURE 12  
VERTICAL DISTRIBUTION OF TCE IN SOIL  
(SECTION A-A')  
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

001627

001628



DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
MB Miller	6-21-01		828208-A9



NOTES:

1. All locations are approximate.
2. Concentrations in  $\mu\text{g/L}$ .

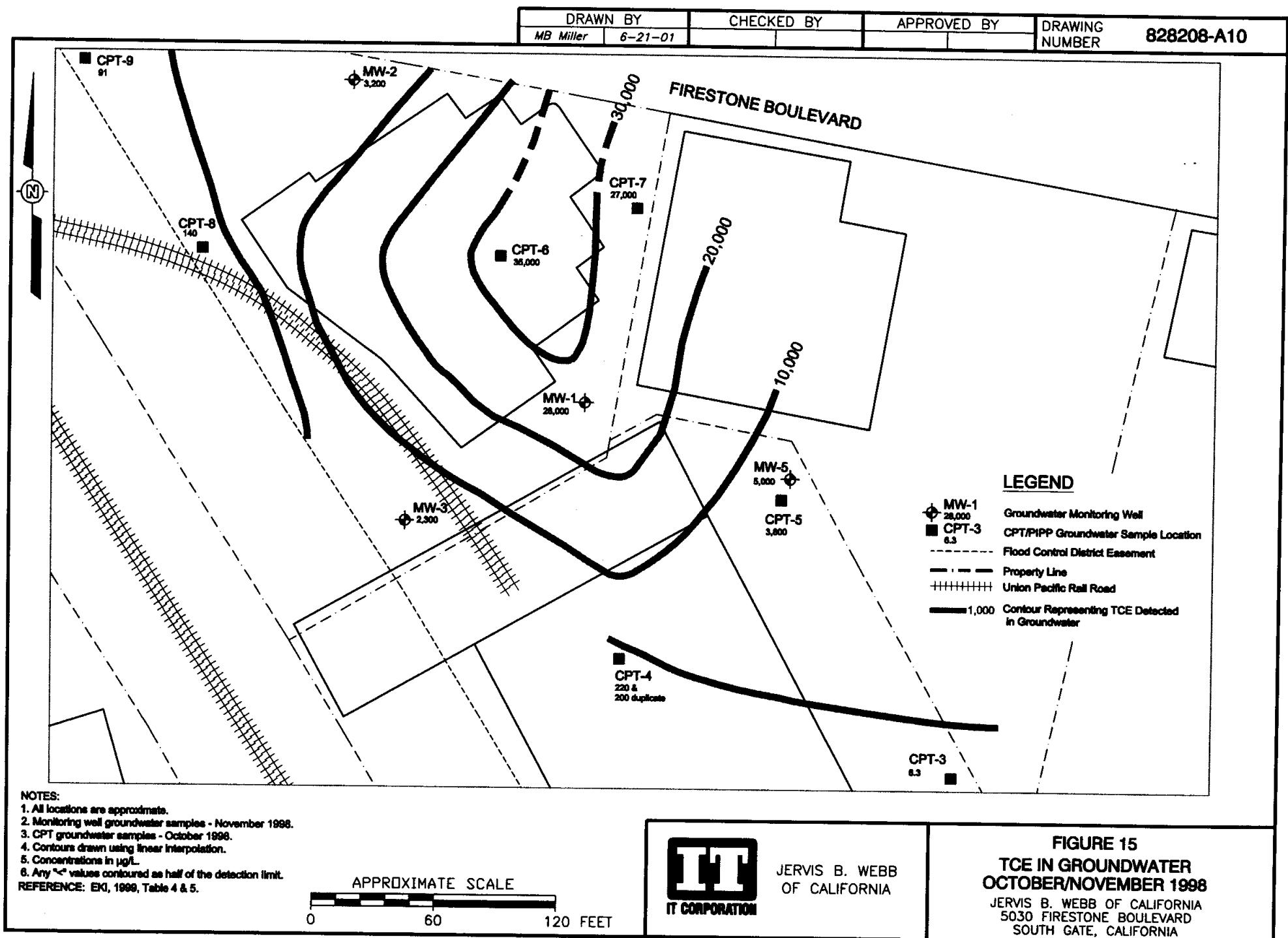
REFERENCE: EKI, 2000, Appendix B.

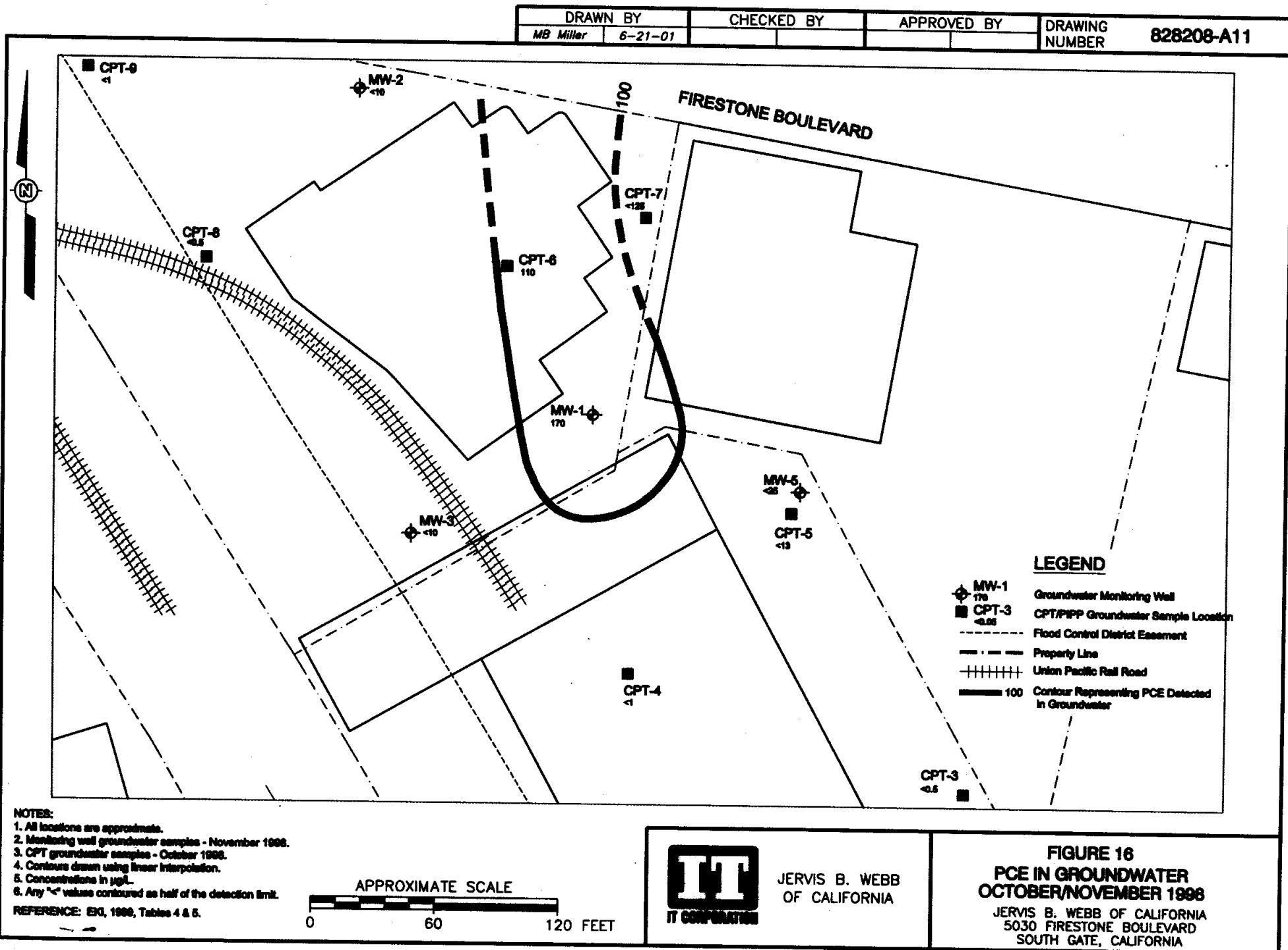
APPROXIMATE SCALE  
  
 0 60 120 FEET

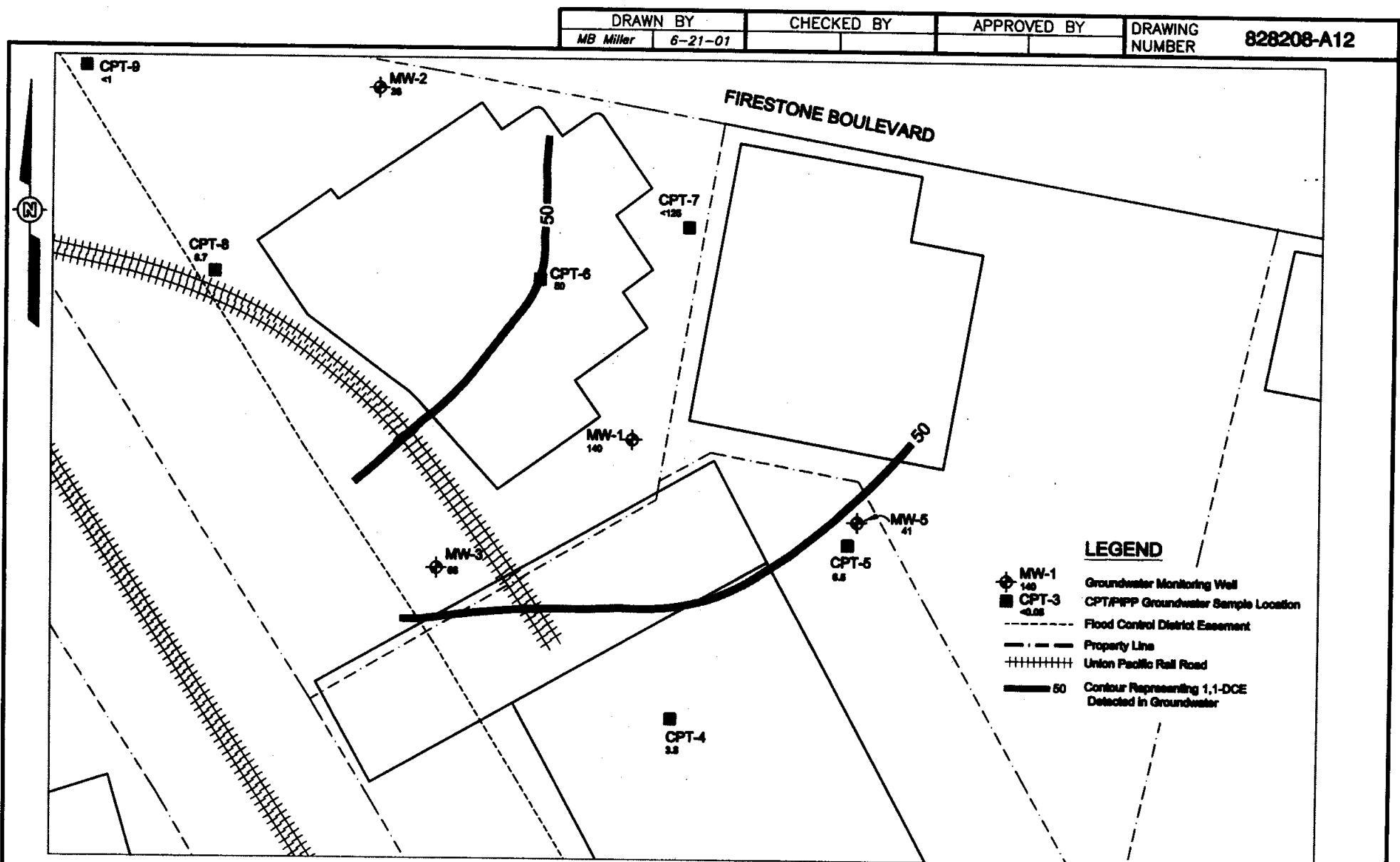


JERVIS B. WEBB  
OF CALIFORNIA

**FIGURE 14**  
**TCE IN GROUNDWATER**  
**SEPTEMBER 2000**  
 JERVIS B. WEBB OF CALIFORNIA  
 5030 FIRESTONE BOULEVARD  
 SOUTH GATE, CALIFORNIA





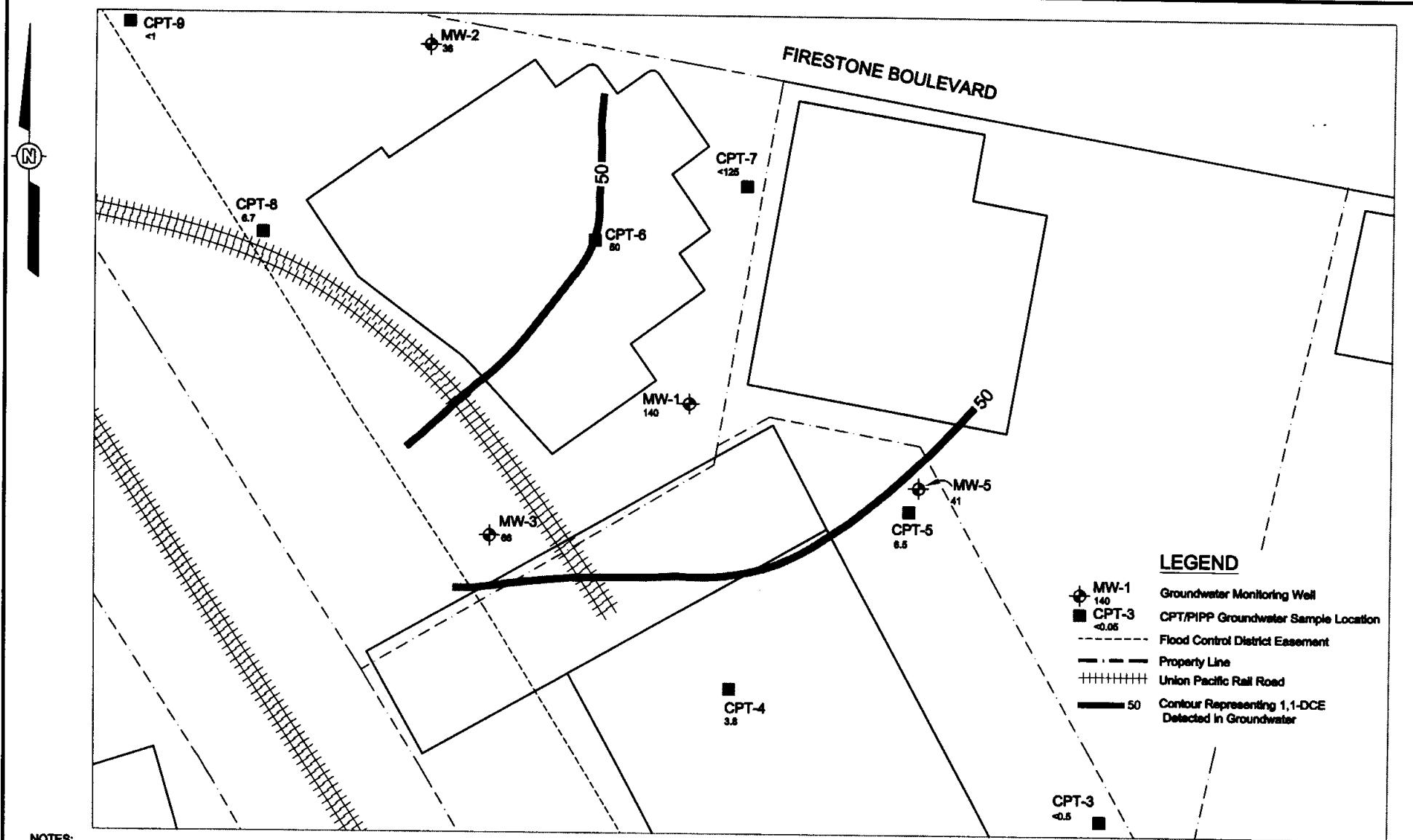


JERVIS B. WEBB  
OF CALIFORNIA

**FIGURE 17**  
**1,1 DCE IN GROUNDWATER**  
**OCTOBER/NOVEMBER 1996**

JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

DRAWN BY MB Miller	CHECKED BY	APPROVED BY	DRAWING NUMBER 828208-A13
6-21-01			



NOTES:

1. All locations are approximate.
2. Monitoring well groundwater samples - November 1998.
3. CPT groundwater samples - October 1998.
4. Contours drawn using linear interpolation.
5. Concentrations in  $\mu\text{g/L}$ .
6. Any " $<$ " values contoured as half of the detection limit.

REFERENCE: EKI, 1999, Tables 4 & 5.

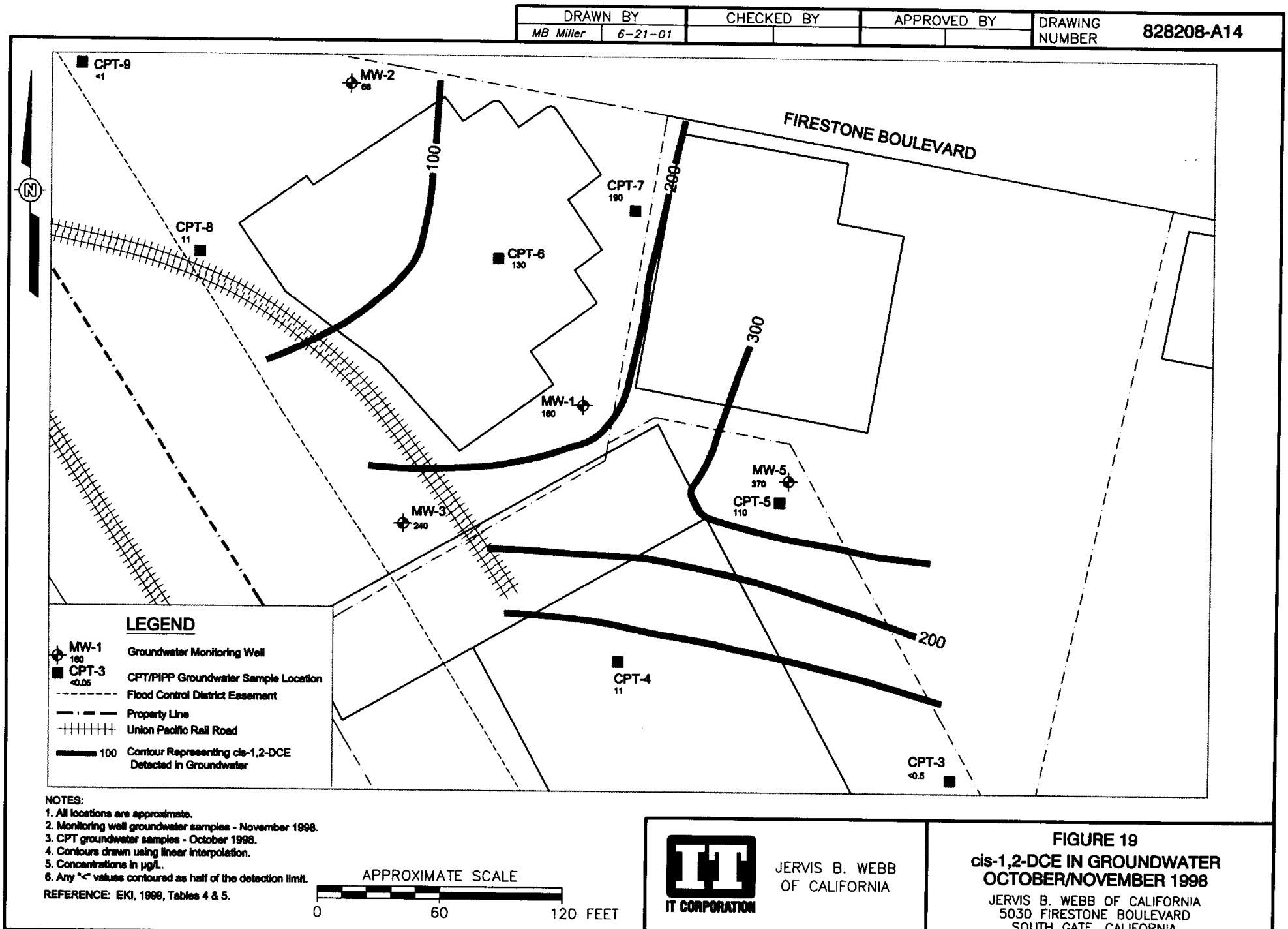
APPROXIMATE SCALE  
0 60 120 FEET



JERVIS B. WEBB  
OF CALIFORNIA

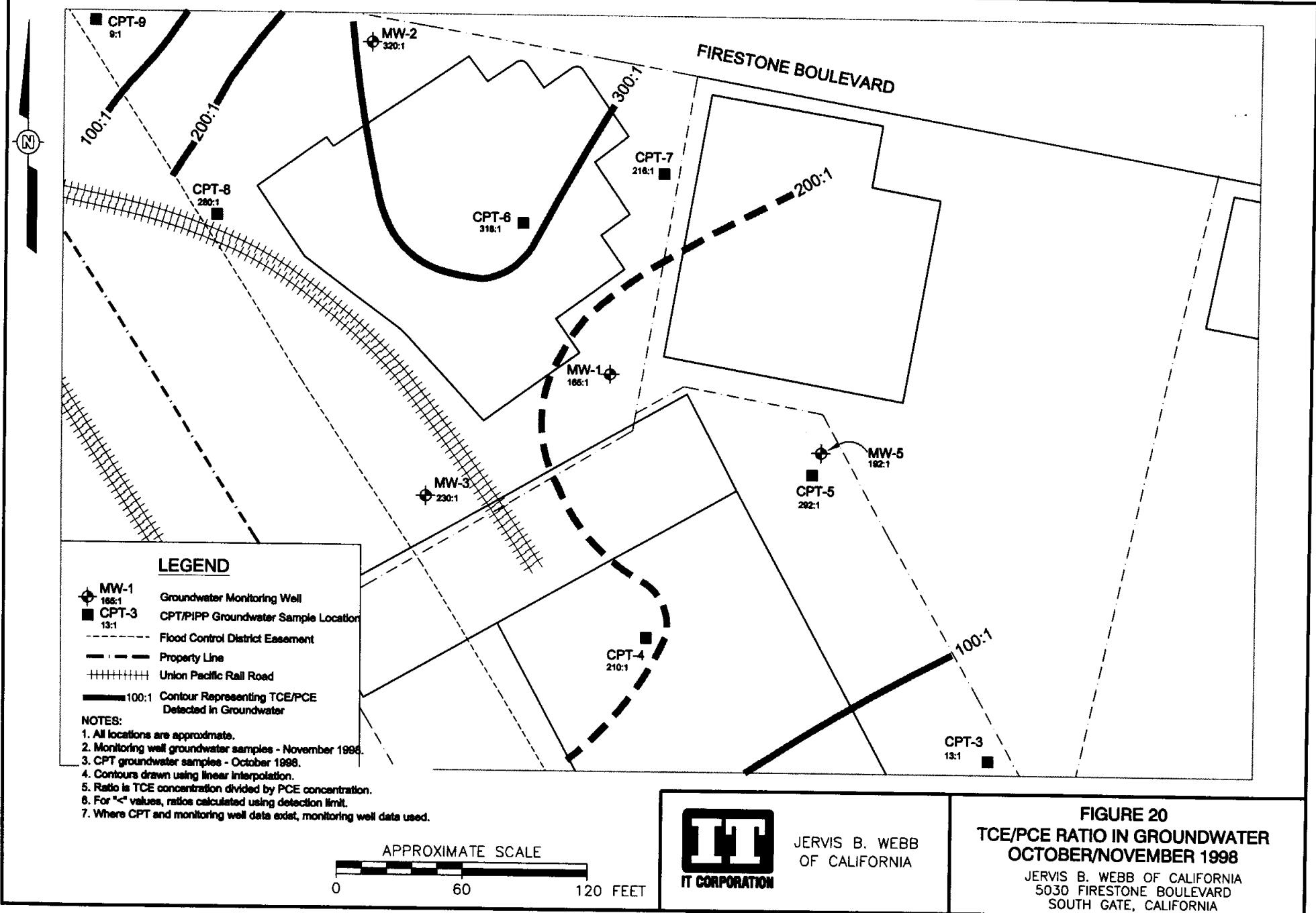
**FIGURE 18**  
**1,1DCA IN GROUNDWATER**  
**OCTOBER/NOVEMBER 1998**

JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA



001634

DRAWN BY	CHECKED BY	APPROVED BY	DRAWING NUMBER
MB Miller	6-21-01		828208-A15



001635

B9-5.5	8.5 Feet	TCE=0.007	PCB=0.018
B9-10.5	10.5 Feet	TCE=ND	PCB=0.046

B9-4	9 Feet	TCE=0.010	PCB=0.042
B9-11	11 Feet	TCE=0.034	PCB=0.12

B9-4	8 Feet	TCE=0.021	PCB=0.078
B9-10	10 Feet	TCE=0.028	PCB=0.22
B9-20.5	20.5 Feet	TCE=0.070	PCB=1.00

B9-5	6 Feet	TCE=0.029	PCB=0.036
B9-10.5	10.5 Feet	TCE=0.19	PCB=0.085

B9-5	8 Feet	TCE=0.051	PCB=0.13
B9-10.5	10.5 Feet	TCE=0.028	PCB=0.018

B9-7	8 Feet	TCE=0.010	PCB=0.086
B9-11	11 Feet	TCE=ND	PCB=ND

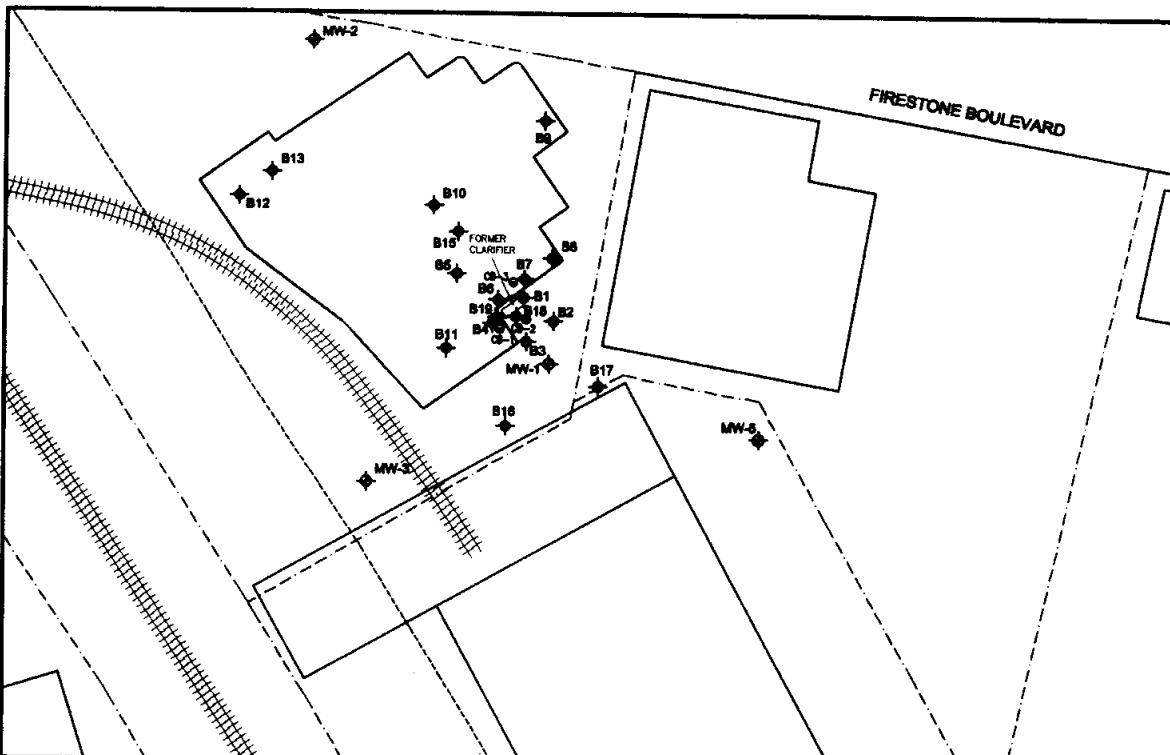
B9-4	8 Feet	TCE=ND	PCB=0.000
B9-11	11 Feet	TCE=0.000	PCB=0.041

B9-3.5	2.5 Feet	TCE=ND	PCB=0.004
B9-10.5	10.5 Feet	TCE=0.041	PCB=0.022

B10-9	8 Feet	TCE=0.036	PCB=0.027
B10-11	11 Feet	TCE=0.036	PCB=ND

B11-9	8 Feet	TCE=0.016	PCB=0.061
B11-11	11 Feet	TCE=0.036	PCB=ND

B13-6	8 Feet	TCE=ND	PCB=ND
B13-8	8 Feet	TCE=ND	PCB=ND



## LEGEND

- ◆ MW-1 Groundwater Monitoring Well
- ◆ B1 Soil Boring Location
- CB-1 Confirmation Bore Boring
- Flood Control District Assessment
- - - Property Line
- ||||| Union Pacific Railroad

## NOTES:

1. All locations are approximate.
2. PCB = polychlorinated biphenyl.
3. TCE = trichloroethylene.
4. ND = not detected above method detection limit.
5. Soil concentrations reported in mg/kg.
6. Sample depths reported in feet below ground surface.

APPROXIMATE SCALE  
0 60 120 FEET

B15-10	10 Feet	TCE=ND	PCB=ND
B15-15	15 Feet	TCE=ND	PCB=ND
B15-20.5	20.5 Feet	TCE=ND	PCB=ND
B15-25.5	25.5 Feet	TCE=ND	PCB=0.024
B15-31	31 Feet	TCE=0.02	PCB=0.041
B15-36.5	36.5 Feet	TCE=0.14	PCB=0.028
B15-40	40 Feet	TCE=1.2	PCB=ND
B15-44.5	44.5 Feet	TCE=1.3	PCB=ND

B16-6	6.5 Feet	TCE=ND	PCB=ND
B16-11	11 Feet	TCE=ND	PCB=ND
B16-16	16 Feet	TCE=ND	PCB=0.027
B16-21	21 Feet	TCE=ND	PCB=0.041
B16-26	31 Feet	TCE=ND	PCB=0.047
B16-31	36.5 Feet	TCE=ND	PCB=0.027
B16-36.5	40 Feet	TCE=ND	PCB=ND
B16-41	44.5 Feet	TCE=0.41	PCB=ND
B16-46	48 Feet	TCE=0.39	PCB=ND
B16-51	51 Feet	TCE=1.3	PCB=ND

B17-6	6 Feet	TCE=ND	PCB=ND
B17-11	11 Feet	TCE=ND	PCB=ND
B17-16	16 Feet	TCE=ND	PCB=ND
B17-21	21 Feet	TCE=ND	PCB=ND
B17-26	26 Feet	TCE=0.048	PCB=ND
B17-31.5	31.5 Feet	TCE=0.488	PCB=ND
B17-36	36 Feet	TCE=1.4	PCB=ND
B17-41	41 Feet	TCE=1.2	PCB=ND
B17-46	46 Feet	TCE=1.8	PCB=ND
B17-51.5	53.5 Feet	TCE=1.4	PCB=ND

B18-11	11 Feet	TCE=0.11	PCB=0.40
B18-16	16 Feet	TCE=0.61	PCB=0.37
B18-21	21 Feet	TCE=16	PCB=0.85
B18-27	27 Feet	TCE=0.75	PCB=0.088
B18-31	31 Feet	TCE=2.0	PCB=0.14
B18-36	36 Feet	TCE=0.088	PCB=ND
B18-41	41 Feet	TCE=2.3	PCB=0.081
B18-46	46 Feet	TCE=0.7	PCB=0.16

B19-16	16 Feet	TCE=0.20	PCB=0.42
B19-21	21 Feet	TCE=1.8	PCB=0.28
B19-26	26 Feet	TCE=1.5	PCB=0.28
B19-31	31 Feet	TCE=1.2	PCB=0.25
B19-36.5	36.5 Feet	TCE=0.11	PCB=ND
B19-41	41 Feet	TCE=4.0	PCB=0.16
B19-46	46 Feet	TCE=4.3	PCB=0.18



JERVIS B. WEBB  
OF CALIFORNIA

FIGURE 21  
PROPOSED CONFIRMATION  
SOIL BORING LOCATIONS  
JERVIS B. WEBB OF CALIFORNIA  
5030 FIRESTONE BOULEVARD  
SOUTH GATE, CALIFORNIA

**APPENDIX  
E**

## **APPENDIX E**

### **TABLES AND FIGURES FROM QUARTERLY PROGRESS REPORT, APRIL THROUGH JUNE 2001 (EKI 2001)**

**TABLE 1**  
***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-1	2/27/98	106.09	44.79	61.30	
	3/2/98	106.09	44.82	61.27	
	3/4/98	106.09	44.58	61.51	
	4/8/98	106.09	44.57	61.52	
	5/20/98	106.09	43.99	62.10	
	10/8/98	106.09	43.38	62.71	
	11/5/98	106.09	43.14	62.95	
	12/21/98	106.09	43.37	62.72	
	1/19/99	106.09	43.26	62.83	
	2/3/99	106.09	42.98	63.11	
	3/30/99	106.09	43.22	62.87	
	6/1/99	106.09	43.48	62.61	
	7/29/99	106.09	43.82	62.27	
	9/1/99	106.09	43.76	62.33	
	9/23/99	106.09	44.03	62.06	
	10/18/99	106.09	44.43	61.66	
	12/8/99	106.09	44.55	61.54	
	1/27/00	106.09	44.40	61.69	
	2/28/00	106.09	44.34	61.75	
	3/15/00	106.09	44.06	62.03	
	4/13/00	106.09	44.73	61.36	
	5/18/00	106.09	44.58	61.51	
	6/20/00	106.09	44.60	61.49	
	7/13/00	106.09	45.17	60.92	
	8/17/00	106.09	45.30	60.79	
	9/7/00	106.09	45.15	60.94	
	10/26/00	106.09	45.87	60.22	
	11/21/00	106.09	45.60	60.49	
	12/5/00	106.09	45.72	60.37	
	1/4/01	106.09	45.67	60.42	
	2/22/01	106.09	45.43	60.66	
	3/8/01	106.09	45.09	61.00	
	4/24/01	106.09	45.75	60.34	
	6/5/01	106.09	45.52	60.57	

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Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-2	2/27/98	106.65	44.02	62.63	
	3/2/98	106.65	44.06	62.59	
	3/4/98	106.65	44.13	62.52	
	4/8/98	106.65	NR	--	
	5/20/98	106.65	43.51	63.14	
	10/8/98	106.65	42.84	63.81	
	11/5/98	106.65	42.64	64.01	
	12/21/98	106.65	42.69	63.96	
	1/19/99	106.65	42.66	63.99	
	2/3/99	106.65	42.55	64.10	
	3/30/99	106.65	42.63	64.02	
	6/1/99	106.65	42.91	63.74	
	7/29/99	106.65	43.13	63.52	
	9/1/99	106.65	43.14	63.51	
	9/23/99	106.65	43.35	63.30	
	10/18/99	106.65	43.60	63.05	
	12/8/99	106.65	43.62	63.03	
	1/27/00	106.65	43.86	62.79	
	2/28/00	106.65	43.86	62.79	
	3/15/00	106.65	43.62	63.03	
	4/13/00	106.65	43.92	62.73	
	5/18/00	106.65	43.50	63.15	
	6/20/00	106.65	43.48	63.17	
	7/13/00	106.65	43.29	63.36	
	8/17/00	106.65	43.38	63.27	
	9/7/00	106.65	44.30	62.35	
	10/26/00	106.65	44.74	61.91	
	11/21/00	106.65	44.52	62.13	
	12/5/00	106.65	44.51	62.14	
	1/4/01	106.65	44.55	62.10	
	2/22/01	106.65	43.91	62.74	
	3/8/01	106.65	43.25	63.40	
	4/24/01	106.65	44.64	62.01	
	6/5/01	106.65	44.50	62.15	

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***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-3	2/27/98	105.87	44.55	61.32	
	3/2/98	105.87	44.56	61.31	
	3/4/98	105.87	44.40	61.47	
	4/8/98	105.87	44.39	61.48	
	5/20/98	105.87	43.80	62.07	
	10/8/98	105.87	43.26	62.61	
	11/5/98	105.87	43.60	62.27	
	12/21/98	105.87	43.33	62.54	
	1/19/99	105.87	43.18	62.69	
	2/3/99	105.87	42.97	62.90	
	3/30/99	105.87	43.19	62.68	
	6/1/99	105.87	43.58	62.29	
	7/29/99	105.87	43.85	62.02	
	9/1/99	105.87	43.90	61.97	
	9/23/99	105.87	44.10	61.77	
	10/18/99	105.87	44.37	61.50	
	12/8/99	105.87	44.64	61.23	
	1/27/00	105.87	44.69	61.18	
	2/28/00	105.87	44.75	61.12	
	3/15/00	105.87	44.41	61.46	
	4/13/00	105.87	44.86	61.01	
	5/18/00	105.87	44.94	60.93	
	6/20/00	105.87	44.88	60.99	
	7/13/00	105.87	45.25	60.62	
	8/17/00	105.87	45.06	60.81	
	9/7/00	105.87	44.83	61.04	
	10/26/00	105.87	45.94	59.93	
	11/21/00	105.87	46.00	59.87	
	12/5/00	105.87	45.77	60.10	
	1/4/01	105.87	45.89	59.98	
	2/22/01	105.87	45.53	60.34	
	3/8/01	105.87	45.21	60.66	
	4/24/01	105.87	45.72	60.15	
	6/5/01	105.87	45.74	60.13	

**TABLE 1**  
***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-4	11/3/98	104.72	42.77	61.95	
	11/5/98	104.72	42.64	62.08	
	12/21/98	104.72	42.93	61.79	
	1/19/99	104.72	42.80	61.92	
	2/3/99	104.72	42.63	62.09	
	3/30/99	104.72	42.89	61.83	
	6/1/99	104.72	43.28	61.44	
	7/29/99	104.72	43.63	61.09	
	9/1/99	104.72	43.70	61.02	
	9/23/99	104.72	43.96	60.76	
	10/18/99	104.72	44.22	60.50	
	12/8/99	104.72	44.48	60.24	
	1/27/00	104.72	44.70	60.02	
	2/28/00	104.72	NR	--	Truck parked on well.
	3/15/00	104.72	44.37	60.35	
	4/13/00	104.72	NR	--	Truck parked on well.
	5/18/00	104.72	44.81	59.91	
	6/20/00	104.72	44.94	59.78	
	7/13/00	104.72	45.10	59.62	
	8/17/00	104.72	45.36	59.36	
	9/7/00	104.72	45.31	59.41	
	10/26/00	104.72	45.89	58.83	
	11/21/00	104.72	45.86	58.86	
	12/5/01	104.72	45.71	59.01	
	1/4/01	104.72	45.79	58.93	
	2/22/01	104.72	45.49	59.23	
	3/8/01	104.72	45.62	59.10	
	4/24/01	104.72	45.68	59.04	
	6/5/01	104.72	45.80	58.92	

**TABLE 1**  
***Groundwater Elevations in Monitoring Wells***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Date	Elevation of Top-of-Casing (ft msl)	Depth to Water (ft bgs)	Elevation of Water Surface (ft msl)	Comments
MW-5	11/3/98	106.13	43.32	62.81	
	11/5/98	106.13	43.30	62.83	
	12/21/98	106.13	43.58	62.55	
	1/19/99	106.13	43.46	62.67	
	2/3/99	106.13	43.20	62.93	
	3/30/99	106.13	43.49	62.64	
	6/1/99	106.13	43.88	62.25	
	7/29/99	106.13	44.19	61.94	
	9/1/99	106.13	44.22	61.91	
	9/23/99	106.13	44.48	61.65	
	10/18/99	106.13	44.72	61.41	
	12/8/99	106.13	44.98	61.15	
	1/27/00	106.13	45.17	60.96	
	2/28/00	106.13	45.15	60.98	
	3/15/00	106.13	44.87	61.26	
	4/13/00	106.13	45.22	60.91	
	5/18/00	106.13	45.29	60.84	
	6/20/00	106.13	45.30	60.83	
	7/13/00	106.13	45.63	60.50	
	8/17/00	106.13	45.85	60.28	
	9/7/00	106.13	45.69	60.44	
	10/26/00	106.13	46.35	59.78	
	11/21/00	106.13	46.33	59.80	
	12/5/00	106.13	46.16	59.97	
	1/4/01	106.13	46.26	59.87	
	2/22/01	106.13	46.00	60.13	
	3/8/01	106.13	45.95	60.18	
	4/24/01	106.13	46.19	59.94	
	6/5/01	106.13	46.30	59.83	

**NOTES:**

ft msl = feet above mean sea level

ft bgs = feet beneath ground surface

NR = Not Recorded

-- Not Applicable

1. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-1, MW-2, and MW-3 were surveyed on 6 March 1998 by Rattray & Associates, Inc.
2. Monitoring well northing and easting coordinates and top-of-casing elevations for wells MW-4 and MW-5 were surveyed on 21 December 1998 by Rattray & Associates, Inc.

**TABLE 2**  
**Results of VOCs Detected in Groundwater Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration (ug/L)									
			Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE	
MW-1	MW-1-0304	3/4/98	<100	<100	<100	220	<100	130	<100	140	24,000	
	MW-1-0304DUP	3/4/98	<100	<100	<100	210	<100	150	<100	160	25,000	
	MW-1-0520	5/20/98	<125	<125	<125	160	<125	130	<125	<125	24,000	
	MW-1	11/5/98	<125	<125	<125	140	<125	160	<125	170	28,000	
	MW-1	2/3/99	<125	<125	<125	130	<125	160	<125	160	27,000	
	MW-1	6/1/99	<100	<100	<100	140	<100	190	<100	160	28,000	
	MW-1	9/1/99	<100	<100	140	220	<100	200	<100	190	32,000	
	MW-1	12/8/99	<250	<250	<250	<250	<250	<250	<250	<250	30,000	
	MW-1-A <sup>(3)</sup>	12/8/99	<100	<100	110	150	<100	200	<100	160	33,000	
	MW-1	3/15/00	<100	<100	<100	160	<100	230	<100	150	30,000	
	MW-1	6/20/00	<100	<100	<100	<100	<100	<100	<100	<100	24,000	
	MW-1	9/7/00	<100	<100	<100	<100	<100	<100	<100	<100	21,000	
	MW-1	12/5/00	<100	<100	<100	<100	<100	<100	<100	<100	30,000	
	MW-1	3/8/01	<100	<100	<100	<100	<100	<100	<100	<100	23,000	
	MW-1	6/5/01	<125	<125	<125	<125	<125	<125	<125	150	31,000	
MW-2	MW-2-0304	3/4/98	<10	<10	13	34	<10	65	<10	<10	2,700	
	MW-2-0520	5/20/98	<10	<10	14	38	<10	68	<10	<10	3,000	
	MW-2	11/5/98	<10	<10	13	36	<10	68	<10	<10	3,200	
	MW-2	2/3/99	<10	<10	13	36	<10	70	<10	<10	3,200	
	MW-2	6/1/99	<10	<10	12	34	<10	68	<10	<10	2,800	
	MW-2	9/1/99	<10	<10	16	49	<10	72	<10	<10	3,100	
	MW-2	12/8/99	<13	<13	<13	<13	<13	57	<13	<13	2,400	
	MW-2-A <sup>(3)</sup>	12/8/99	<10	<10	12	22	<10	63	<10	<10	2,600	
	MW-2	3/15/00	<10	<10	<10	<10	<10	74	<10	<10	2,800	
	MW-2	6/20/00	<10	<10	<10	<10	<10	46	<10	<10	2,000	
	MW-2	9/7/00	<10	<10	<10	<10	<10	42	<10	<10	1,800	
	MW-2	12/5/00	<10	<10	<10	<10	<10	50	<10	<10	2,300	
	MW-2	3/8/01	<10	<10	<10	<10	<10	44	<10	<10	1,800	
	MW-2-DUP	3/8/01	<10	<10	<10	<10	<10	42	<10	<10	1,600	
	MW-2	6/5/01	<10	<10	<10	<10	<10	47	<10	<10	2,300	

**TABLE 2**  
**Results of VOCs Detected in Groundwater Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration (ug/L)									
			Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE	
MW-3	MW-3-0304	3/4/98	<10	13	14	82	<10	200	<10	<10	2,800	
	MW-3-0520	5/20/98	<10	<10	13	58	<10	230	15	<10	2,800	
	MW-3	11/5/98	<10	<10	11	66	<10	240	18	<10	2,300	
	MW-3	2/3/99	<10	<10	11	64	<10	220	18	<10	2,000	
	MW-3	6/1/99	<10	<10	11	66	53	240	18	<10	1,900	
	MW-3	9/1/99	<10	<10	13	80	<10	270	20	<10	2,600	
	MW-3	12/8/99	<13	<13	<13	<13	<13	220	<13	<13	2,500	
	MW-3-A <sup>(3)</sup>	12/8/99	<10	<10	13	55	<10	240	19	<10	2,900	
	MW-3	3/15/00	<10	<10	11	61	<10	300	20	<10	3,100	
	MW-3	6/20/00	<10	<10	10	<10	<10	170	14	<10	1,900	
	MW-3-DUP	6/20/00	<10	<10	11	<10	<10	200	16	<10	2,100	
	MW-3	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700	
	MW-3-DUP	9/7/00	<10	<10	<10	<10	<10	160	<10	<10	1,700	
	MW-3	12/5/00	<10	<10	<10	<10	<10	200	<10	<10	2,400	
	MW-3-DUP	12/5/00	<10	<10	20	<10	<10	210	<10	<10	2,500	
	MW-3	3/8/01	<10	<10	<10	55	<10	200	<10	<10	1,700	
	MW-3	6/5/01	<10	<10	<10	<10	<10	210	<10	<10	2,300	
MW-4	MW-4	11/5/98	<0.5	<0.5	<0.5	<0.5	<0.5	0.67	<0.5	<0.5	6.7	
	MW-4	2/3/99	<0.5	<0.5	<0.5	<0.5	2.1	<0.5	<0.5	<0.5	<0.5	
	MW-4	6/1/99	<0.5	<0.5	<0.5	<0.5	65	1.1	<0.5	<0.5	0.90	
	MW-4	9/1/99	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.1	1.0	<0.5	17	
	MW-4-A <sup>(3)</sup>	12/8/99	1.2	<0.5	<0.5	<0.5	<0.5	4.6	1.1	<0.5	18	
	MW-4	3/15/00	77	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.68	
	MW-4	6/20/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	9/7/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	12/5/00	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	3/8/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
	MW-4	6/5/01	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	

**TABLE 2**  
**Results of VOCs Detected in Groundwater Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration (ug/L)								
			Benzene	Toluene	1,1-DCA	1,1-DCE	1,2-DCA	c-1,2-DCE	t-1,2-DCE	PCE	TCE
MW-5	MW-5	11/5/98	<25	<25	<25	42	<25	380	30	<25	5,000
	MW-5-DUP	11/5/98	<25	<25	<25	40	<25	360	29	<25	4,800
	MW-5	2/3/99	<25	<25	<25	49	<25	420	35	<25	5,100
	MW-5-DUP	2/3/99	<25	<25	<25	45	<25	370	31	<25	4,500
	MW-5	6/1/99	<25	<25	<25	52	35	420	36	<25	5,500
	MW-5-DUP	6/1/99	<25	<25	<25	56	39	430	35	<25	5,300
	MW-5	9/1/99	<25	<25	<25	40	<25	420	45	<25	5,500
	MW-5-DUP	9/1/99	<25	<25	<25	69	<25	440	45	<25	6,000
	MW-5	12/8/99	<50	<50	<50	<50	<50	390	<50	<50	5,100
	MW-5-A <sup>(3)</sup>	12/8/99	<25	<25	<25	<25	<25	410	25	<25	5,300
	MW-5-DUP	12/8/99	<50	<50	<50	<50	<50	360	<50	<50	5,000
	MW-5-DUP-A <sup>(3)</sup>	12/8/99	<25	<25	<25	<25	<25	410	26	<25	5,300
	MW-5	3/15/00	<50	<50	<50	<50	<50	440	<50	<50	5,500
	MW-5-DUP	3/15/00	<50	<50	<50	<50	<50	450	<50	<50	5,800
	MW-5	6/20/00	<25	<25	<25	<25	<25	350	<25	<25	4,400
	MW-5	9/7/00	<10	<10	<10	<10	<10	280	<10	<10	3,700
	MW-5	12/5/00	<10	<10	<10	<10	<10	190	<10	<10	4,700
	MW-5	3/8/01	<25	140	<25	<25	<25	260	<25	<25	3,600
	MW-5	6/5/01	<25	<25	<25	<25	<25	340	<25	<25	5,400
	MW-5-DUP	6/5/01	<25	<25	<25	<25	<25	350	<25	<25	5,400

**NOTES:**

1,1-DCA = 1,1-dichloroethane  
 1,1-DCE = 1,1-dichloroethene  
 1,2-DCA = 1,2-dichloroethane  
 c-1,2-DCE = cis-1,2-dichloroethene  
 t-1,2-DCE = trans-1,2-dichloroethene

PCE = tetrachloroethene  
 TCE = trichloroethene  
 VOCs = volatile organic compounds  
 ug/L = micrograms per liter

- Analyses performed by Orange Coast Analytical, Inc., in Tustin, California, using EPA Method 8260 for VOCs.
- < indicates that the analyte was not detected at a concentration above the indicated method detection limit.
- Samples collected on 8 December 1999 were initially analyzed on 9 December 1999 and were re-analyzed on 17 December 1999 in an attempt to achieve lower method detection limits.

**TABLE 3**  
**Additional Analytical Results for Groundwater Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Well ID	Sample Number	Sample Date	Analyte Concentration (mg/L)						
			Arsenic	Barium	Chromium	Chromium VI	Molybdenum	Zinc	TDS
MW-1	MW-1-0520	5/20/98	--	--	--	--	--	--	1,500
	MW-1	3/8/01	0.32	0.13	<0.01	<0.01	0.47	0.016	--
	MW-1	6/5/01	0.32	0.25	<0.01	<0.01	0.45	0.024	--
MW-2	MW-2-0520	5/20/98	--	--	--	--	--	--	2,500
	MW-2	3/8/01	0.0066	0.019	<0.01	<0.01	1.1	0.015	--
	MW-2-DUP	3/8/01	0.0056	0.019	<0.01	<0.01	1.1	0.014	--
	MW-2	6/5/01	0.039	0.090	<0.01	<0.01	0.95	0.016	--
MW-3	MW-3-0520	5/20/98	--	--	--	--	--	--	1,100
	MW-3	3/8/01	0.080	0.15	<0.01	<0.01	0.71	0.012	--
	MW-3	6/5/01	0.11	0.32	<0.01	<0.01	0.79	0.023	--
MW-4	MW-4	3/8/01	0.0079	0.027	<0.01	<0.01	<0.05	0.025	--
	MW-4	6/5/01	0.027	0.030	<0.01	<0.01	<0.05	0.020	--
MW-5	MW-5	3/8/01	0.19	0.15	<0.01	<0.01	0.84	0.014	--
	MW-5	6/5/01	0.15	0.16	<0.01	<0.01	1.1	0.011	--
	MW-5-DUP	6/5/01	0.19	0.31	<0.01	<0.01	0.92	0.017	--

**NOTES:** TDS = total dissolved solids                                  -- indicates not analyzed  
mg/L = milligrams per liter

1. The following analyses were performed by Orange Coast Analytical, Inc., in Tustin, California:  
Total Arsenic by EPA Method 206.2, CCR Metals by EPA Methods 200.7, 218.4, and 245.1, and TDS by EPA Method 160.1.
2. < indicates that the analyte was not detected at a concentration above the indicated method detection limit.

**TABLE 4a**  
**Soil Vapor Extraction Data: Blower Influent**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal		Cumulative Mass Removal		
				(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System startup on 3/16/00 at 16:00.</b>													
3/16/00	16:45	5.6	0%	4.5	4.1	35	2,000+	860	1.8	1.9	0	0	
3/17/00	7:00	20	100%	5.2	4.7	37	94	-					
3/18/00	6:30	45	100%	5.4	4.9	38	128	-					
<b>System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.</b>													
3/19/00	6:30	48	13%	6.1	5.53	38	103	-					
3/20/00	6:30	72	100%	8.6	7.7	43	145	-					
3/21/00	7:00	96	100%	4.8	4.1	60	745	-					
3/22/00	7:30	121	100%	11	10	15	173	490	2.5	2.6	10	11	4A
3/30/00	11:00	316	100%	20	18	45	39	-					
4/6/00	11:00	483	100%	25	17	125	42	-					
4/13/00	8:00	648	100%	21	13	150	42	70	0.45	0.51	43	45	4A
4/20/00	7:30	815	100%	21	13	145	43	-					
4/27/00	7:00	983	100%	16	10	150	30	-					
5/4/00	8:30	1,152	100%	16	10	150	20	-					
5/11/00	6:30	1,318	100%	14	9.0	150	20	-					
5/18/00	7:00	1,486	100%	19	12	150	38	53	0.32	0.34	56	60	4A
				28	18	150	38	-	0.47	0.50	-	-	
5/25/00	6:30	1,654	100%	18	12	150	19	-					
6/1/00	6:30	1,822	100%	18	11	150	34	-					
6/8/00	7:00	1,990	100%	26	16	155	27	-					
6/15/00	7:30	2,158	100%	26	16	150	28	-					
<b>System shut down on 6/21/00 at 17:30. System restarted on 7/6/00 at 10:00.</b>													
7/6/00	10:23	2,312	30%	142	97	130	20	37	1.8	2.1	72	77	4B
7/13/00	12:00	2,485	102%	122	79	145	23	18	0.70	1.0	81	88	4A
7/20/00	7:30	2,648	100%	115	73	150	15	-					
<b>System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.</b>													
7/27/00	6:00	2,791	86%	75	49	140	14	-					
8/3/00	8:00	2,961	100%	75	49	140	15	-					
8/8/00	14:30	3,086	100%	77	50	140	15	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>													
8/24/00	12:30	3,326	63%	76	50	140	27	-					
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>													
8/31/00	9:00	3,471	88%	64	45	120	36	-					

**TABLE 4a**  
***Soil Vapor Extraction Data: Blower Influent***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal		Cumulative Mass Removal		
				(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00 at 10:30.</b>													
9/7/00	10:30	3,621	88%	66	46	125	9.7	-					
9/14/00	9:00	3,788	100%	66	43	140	13	5.6	0.12	0.29	104	124	4A
<b>System shut down on 9/14/00 at 11:23.</b>													
9/28/00	11:24	3,788	0%	-	-	120	42	54	-	-	-	-	-
<b>System restarted on 10/1/00 at 6:30.</b>													
10/1/00	6:30	3,791	4%	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>													
10/5/00	7:30	3,795	4%	73	52	120	296	-					
10/12/00	8:00	3,964	100%	74	52	120	39	-					
10/19/00	8:00	4,132	100%	72	51	120	39	-					
10/26/00	8:00	4,301	100%	75	54	115	18	2.3	0.061	0.15	106	128	4A
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>													
11/2/00	8:00	4,422	72%	-	-	140	17	-					
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>													
11/9/00	7:30	4,433	7%	-	-	140	397	-					
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>													
11/16/00	10:00	4,441	5%	-	-	140	144	-					
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>													
11/23/00	7:30	4,443	1%	-	-	140	152	-					
11/30/00	7:30	4,611	100%	-	-	140	121	-					
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>													
12/7/00	8:00	4,768	93%	-	-	140	107	-					
12/14/00	10:30	4,940	100%	57	38	140	6.2	6.7	0.13	0.23	108	133	4A
<b>System shut down on 12/14/00 at 12:15.</b>													
1/4/01	11:37	4,940	0%	170	111	140	44	30	-	-	-	-	

**TABLE 4a**  
**Soil Vapor Extraction Data: Blower Influent**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal		Cumulative Mass Removal		
				(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System restarted on 2/19/01 at 15:45.</b>													
2/19/01	15:45	4,940	0%	-	-	140	42	-					
2/22/01	17:00	5,016	100%	-	-	140	37	-					
3/1/01	12:45	5,180	100%	-	-	140	29	-					
3/8/01	7:30	5,343	100%	-	-	145	48	-					
3/15/01	13:00	5,516	100%	-	-	145	8.5	-					
3/22/01	13:00	5,682	100%	-	-	145	7.8	-					
3/29/01	14:30	5,854	100%	-	-	140	8.5	-					
4/5/01	10:00	6,016	100%	-	-	140	19	-					
4/11/01	9:00	6,160	100%	-	-	140	20	-					
4/18/01	12:30	6,331	100%	145	97	135	25	-					
4/25/01	13:15	6,500	100%	155	104	133	25	-					
5/2/01	11:45	6,666	100%	158	106	135	22	-					
5/9/01	12:30	6,836	100%	162	108	135	19	-					
5/16/01	11:45	7,002	100%	157	103	140	17	-					
5/23/01	11:00	7,169	100%	161	106	140	18	-					
5/31/01	15:36	7,360	100%	60	39	140	4.4	6.8	0.13	0.19	121	155	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>													
6/14/01	12:20	7,360	0%	84	61	112	25	46	-	-	-	-	
6/20/01	13:30	7,515	100%	110	75	130	18	-					
<b>System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.</b>													
6/28/01	6:30	7,540	14%	-	-	-	-	-					

**TABLE 4a**  
**Soil Vapor Extraction Data: Blower Influent**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Operation Time	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal		Cumulative Mass Removal		
				(acf m)	(scfm)				TCE Total VOCs (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows (see Notes column in table):
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
  - B: Mass removal calculated using the previous mass removal rate.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples of undiluted blower influent. The total VOC mass removal rate presented in this table is the sum of the undiluted mass removal rates calculated for each VOC that was detected.

**TABLE 4b**  
**Soil Vapor Extraction Data: Extraction Well SVE-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	9:25	5.6	0.04	0.04	35	865	10,000	0.18	0.19	0	0	
<b>System startup on 3/16/00 at 16:00.</b>												
3/17/00	7:00	20	0.04	0.04	37	191	-					
3/18/00	6:30	45	0.06	0.05	38	195	-					
<b>System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.</b>												
3/19/00	6:30	48	0.70	0.63	38	2,000+	-					
3/20/00	6:30	72	0.63	0.56	43	2,000+	-					
3/21/00	7:00	96	0.61	0.52	60	2,000+	-					
3/22/00	7:30	121	0.58	0.56	15	2,000+	10,000	2.8	2.9	7.1	7.3	4A
3/30/00	11:00	316	0.87	0.79	38	1,799	-					
4/6/00	11:00	483	0.45	0.31	125	719	-					
4/13/00	8:00	648	0.85	0.54	150	716	6,500	1.7	1.8	57	58	4A
4/20/00	7:30	815	0.70	0.45	145	868	-					
4/27/00	7:00	983	0.87	0.55	150	915	-					
5/4/00	8:30	1,152	0.89	0.56	150	1,427	-					
5/11/00	6:30	1,318	0.92	0.58	150	2,000+	-					
5/18/00	7:00	1,486	1.1	0.68	150	276	3,700	1.2	1.3	109	112	4A
			1.1	0.69	150	276	-	1.3	1.3	-	-	
5/25/00	6:30	1,654	1.3	0.84	150	146	-					
6/1/00	6:30	1,822	0.65	0.41	150	128	-					
6/8/00	7:00	1,990	0.67	0.41	155	112	-					
6/15/00	7:30	2,158	0.65	0.41	150	105	-					
<b>System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.</b>												
7/6/00	9:49	2,312	1.3	0.89	130	1,582	3,300	-	-	-	-	
<b>System restarted on 7/6/00 at 10:00.</b>												
7/13/00	12:00	2,485	1.3	0.84	145	2,000+	2,200	0.92	0.95	154	159	4A
7/20/00	7:30	2,648	1.3	0.83	150	154	-					
<b>System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.</b>												
7/27/00	6:00	2,791	2.0	1.3	140	77	-					
8/3/00	8:00	2,961	2.1	1.4	140	89	-					
8/8/00	14:30	3,086	2.1	1.4	140	92	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>												

**TABLE 4b**  
**Soil Vapor Extraction Data: Extraction Well SVE-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,326	2.3	1.5	140	622	-					
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	0.96	0.68	120	1,820	-					
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	1.1	0.78	125	62	-					
9/14/00	9:00	3,788	1.6	1.0	140	76	300	0.15	0.16	183	189	4A
<b>System shut down on 9/14/00 at 11:23.</b>												
9/28/00	11:07	3,788	1.6	1.1	120	2,000+	230	-	-	-	-	
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	2.3	1.6	120	2,000+	-					
10/12/00	8:00	3,964	2.4	1.7	120	1,687	-					
10/19/00	8:00	4,132	2.4	1.7	120	651	-					
10/26/00	8:00	4,301	2.4	1.7	115	385	140	0.12	0.12	186	192	4A
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												
11/2/00	8:00	4,422	3.6	2.4	140	289	-					
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>												
11/9/00	7:30	4,433	2.5	1.6	140	2,000+	-					
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>												
11/16/00	10:00	4,441	2.7	1.7	140	2,000+	-					
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>												
11/23/00	7:30	4,443	2.5	1.7	140	2,000+	-					
11/30/00	7:30	4,611	12.4	8.1	140	748	-					
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>												
12/7/00	8:00	4,768	8.3	5.4	140	111	-					
12/14/00	10:30	4,940	2.4	1.6	140	43	260	0.21	0.22	191	197	4A
<b>System shut down on 12/14/00 at 12:15.</b>												
1/4/01	11:02	4,940	2.3	1.6	120	515	350	-	-	-	-	

**TABLE 4b**  
**Soil Vapor Extraction Data: Extraction Well SVE-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System restarted on 2/19/01 at 15:45.</b>												
2/19/01	15:45	4,940	2.5	1.6	140	875	-					
2/22/01	17:00	5,016	2.6	1.7	140	801	-					
3/1/01	12:45	5,180	2.5	1.7	140	1,505	-					
3/8/01	7:30	5,343	2.5	1.6	145	79	-					
3/15/01	13:00	5,516	2.5	1.6	145	37	-					
3/22/01	13:00	5,682	2.6	1.6	145	53	-					
3/29/01	14:30	5,854	2.3	1.6	130	38	-					
4/5/01	10:00	6,016	-	-	140	19	-					
4/11/01	9:00	6,160	2.3	1.5	140	19	-					
4/18/01	12:30	6,331	2.3	1.5	135	17	-					
4/25/01	13:15	6,500	2.4	1.6	133	16	-					
5/2/01	11:45	6,666	2.4	1.6	135	18	-					
5/9/01	12:30	6,836	2.6	1.7	135	16	-					
5/16/01	11:45	7,002	2.6	1.7	140	18	-					
5/23/01	11:00	7,169	2.7	1.7	140	19	-					
5/31/01	15:58	7,360	2.6	1.7	140	5.6	7.8	0.0066	0.011	201	208	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												
6/14/01	11:06	7,360	29	21	112	7.1	11	-	-	-	-	-
6/20/01	12:30	7,515	17	11	130	0.0	-					
<b>System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.</b>												
6/28/01	6:30	7,540	25	20	82	9.2	-					

**TABLE 4b**  
**Soil Vapor Extraction Data: Extraction Well SVE-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well SVE-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

**TABLE 4c**  
**Soil Vapor Extraction Data: Extraction Well SVE-2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	10:10	5.6	0.61	0.56	35	227	75	0.021	0.021	0	0	
<b>System Startup on 3/16/00 at 16:00.</b>												
3/17/00	7:00	20.3	0.61	0.55	37	191	-					
3/18/00	6:30	44.7	0.61	0.55	38	33	-					
<b>System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.</b>												
3/19/00	6:30	47.9	0.65	0.59	38	298	-					
3/20/00	6:30	72.2	0.94	0.84	43	235	-					
3/21/00	7:00	96.3	0.89	0.76	60	227	-					
3/22/00	7:30	120.5	0.57	0.55	15	93	-					
3/30/00	11:00	316	0.59	0.53	38	78	-					
4/6/00	11:00	483	0.74	0.51	125	38	-					
4/13/00	8:00	648	2.5	1.6	150	26	-					
4/20/00	7:30	815	1.1	0.71	145	5.4	-					
4/27/00	7:00	983	2.4	1.5	150	2.7	-					
5/4/00	8:30	1,152	2.3	1.5	150	5.8	-					
5/11/00	6:30	1,318	2.2	1.4	150	5.2	-					
5/18/00	7:00	1,486	2.2	1.4	150	13	-					
			2.0	1.3	150	13	-					
5/25/00	6:30	1,654	2.1	1.3	150	6.8	-					
6/1/00	6:30	1,822	2.1	1.3	150	28	-					
6/8/00	7:00	1,990	2.1	1.3	155	42	-					
6/15/00	7:30	2,158	2.1	1.3	150	38	-					
<b>System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.</b>												
7/6/00	9:25	2,312	1.2	0.83	130	37	120	0.050	0.054	3.4	3.6	4A
<b>System restarted on 7/6/00 at 10:00.</b>												
7/13/00	12:00	2,485	1.3	0.80	145	6.8	-					
7/20/00	7:30	2,648	1.3	0.80	150	27	-					
<b>System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.</b>												
7/27/00	6:00	2,791	1.6	1.1	140	18	-					
8/3/00	7:30	2,961	1.6	1.0	140	17	-					
8/8/00	14:30	3,086	1.6	1.0	140	14	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>												
8/24/00	12:30	3,326	1.9	1.2	140	1.7	-					

**TABLE 4c**  
**Soil Vapor Extraction Data: Extraction Well SVE-2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	1.5	1.1	120	22	-					
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	1.6	1.1	125	16	-					
9/14/00	9:00	3,788	1.6	1.1	140	20	77	0.041	0.042	6.2	6.5	4A
<b>System shut down at 11:23.</b>												
9/28/00	10:50	3,788	1.4	1.0	120	61	110	-	-	-	-	
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	1.9	1.4	120	9.7	-					
10/12/00	8:00	3,964	1.9	1.4	120	97	-					
10/19/00	8:00	4,132	1.9	1.3	120	33	-					
10/26/00	8:00	4,301	2.1	1.5	115	28	-					
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												
11/2/00	8:00	4,422	-	-	140	6.0	-					
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>												
11/9/00	7:30	4,433	-	-	140	8.2	-					
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>												
11/16/00	10:00	4,441	-	-	140	810	-					
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>												
11/23/00	7:30	4,443	-	-	140	7.5	-					
11/30/00	7:30	4,611	-	-	140	5.3	-					
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>												
12/7/00	8:00	4,768	-	-	140	40	-					
12/14/00	10:30	4,940	2.9	1.9	140	9.7	29	0.027	0.029	7.8	8.2	4A
<b>System shut down on 12/14/00 at 12:15.</b>												
1/4/01	10:20	4,940	1.9	1.3	120	25	34	-	-	-	-	

**TABLE 4c**  
**Soil Vapor Extraction Data: Extraction Well SVE-2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System restarted on 2/19/01 at 15:45.</b>												
2/19/01	15:45	4,940	-	-	140	38	-					
2/22/01	17:00	5,016	-	-	140	46	-					
3/1/01	12:45	5,180	-	-	140	61	-					
3/8/01	7:30	5,343	-	-	145	33	-					
3/15/01	13:00	5,516	-	-	145	5.8	-					
3/22/01	13:00	5,682	-	-	145	3.7	-					
3/29/01	14:30	5,854	-	-	140	7.5	-					
4/5/01	10:00	6,016	-	-	140	16	-					
4/11/01	9:00	6,160	2.3	1.5	140	11	-					
4/18/01	12:30	6,331	2.3	1.6	135	6.3	-					
4/25/01	13:15	6,500	2.4	1.6	133	5.1	-					
5/2/01	11:45	6,666	2.4	1.6	135	4.8	-					
5/9/01	12:30	6,836	3.1	2.1	135	3.5	-					
5/16/01	11:45	7,002	3.4	2.2	140	1.3	-					
5/23/01	11:00	7,169	3.5	2.3	140	2.0	-					
5/31/01	15:50	7,360	2.3	1.5	140	6.1	10	0.0075	0.0090	9.6	10	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												
6/14/01	10:54	7,360	43	31	115	8.4	22	-	-	-	-	
6/20/01	12:30	7,515	16	11	130	1.1	-					
<b>System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.</b>												
6/28/01	6:30	7,540	30	25	78	24	-					

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**TABLE 4c**  
**Soil Vapor Extraction Data: Extraction Well SVE-2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well SVE-2 is screened in the shallow vadose zone from 18 to 24 feet below ground surface.

**TABLE 4d**  
**Soil Vapor Extraction Data: Extraction Well SVE-3**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	1.4	1.0	120	2.6	-	-	-	-	-	-
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	1.4	1.0	125	1.2	-	-	-	-	-	-
9/14/00	9:00	3,788	1.5	1.0	140	1.5	2.5	0.0012	0.0028	0.71	1.1	4A
<b>System shut down on 9/14/00 at 11:23</b>												
9/28/00	9:52	3,788	-	-	120	8.0	3.8	-	-	-	-	-
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-	-	-	-	-	-
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	1.8	1.3	120	4.6	-	-	-	-	-	-
10/12/00	8:00	3,964	1.9	1.3	120	5.6	-	-	-	-	-	-
10/19/00	8:00	4,132	1.9	1.3	120	4.1	-	-	-	-	-	-
10/26/00	8:00	4,301	1.9	1.3	115	4.1	-	-	-	-	-	-
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												
11/2/00	8:00	4,422	7.1	4.7	140	0.5	-	-	-	-	-	-
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>												
11/9/00	7:30	4,433	1.9	1.3	140	25.2	-	-	-	-	-	-
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>												
11/16/00	10:00	4,441	-	-	140	8.9	-	-	-	-	-	-
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>												
11/23/00	7:30	4,443	-	-	140	11.9	-	-	-	-	-	-
11/30/00	7:30	4,611	5.6	3.6	140	6.2	-	-	-	-	-	-
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>												
12/7/00	8:00	4,768	-	-	140	14.4	-	-	-	-	-	-
12/14/00	10:30	4,940	2.3	1.5	140	1.2	1.2	0.00089	0.0023	0.76	1.2	4A
<b>System shut down on 12/14/00 at 12:15.</b>												
1/4/01	9:45	4,940	2.1	1.5	120	1.5	1.3	-	-	-	-	-

**TABLE 4d**  
**Soil Vapor Extraction Data: Extraction Well SVE-3**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System restarted on 2/19/01 at 15:45.</b>												
2/19/01	15:45	4,940	3.8	2.5	140	6.0	-					
2/22/01	17:00	5,016	3.4	2.2	140	6.4	-					
3/1/01	12:45	5,180	2.6	1.7	140	6.3	-					
3/8/01	7:30	5,343	2.6	1.7	145	0.0	-					
3/15/01	13:00	5,516	2.6	1.7	145	0.5	-					
3/22/01	13:00	5,682	2.6	1.7	145	3.3	-					
3/29/01	14:30	5,854	2.7	1.7	140	8.3	-					
4/5/01	10:00	6,016	2.7	1.8	140	10	-					
4/11/01	9:00	6,160	2.6	1.7	140	1.9	-					
4/18/01	12:30	6,331	2.5	1.7	135	1.8	-					
4/25/01	13:15	6,500	2.7	1.8	133	3.3	-					
5/2/01	11:45	6,666	2.7	1.8	135	3.1	-					
5/9/01	12:30	6,836	3.5	2.3	135	3.5	-					
5/16/01	11:45	7,002	3.6	2.3	140	1.5	-					
5/23/01	11:00	7,169	3.5	2.3	140	2.5	-					
5/31/01	16:05	7,360	10	6.6	140	5.6	5.0	0.016	0.027	1.6	2.7	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												
6/14/01	10:02	7,360	5.7	4.1	115	2.0	1.6	-	-	-	-	
6/20/01	12:30	7,515	11	7.7	130	0.9	-					
<b>System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.</b>												
6/28/01	6:30	7,540	32	26	81	4.3	-					

# TABLE 4d

## ***Soil Vapor Extraction Data: Extraction Well SVE-3***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-3. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well SVE-3 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

**TABLE 4e**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	11:35	5.6	0	0	0	65	29	-	-	-	-	-
<b>System startup on 3/16/00 at 16:00 with VMP-1 used as a monitoring well.</b>												
4/6/00	11:00	483	0	0	0	6.4	-	-	-	-	-	-
4/13/00	8:00	648	0	0	0	8.2	-	-	-	-	-	-
<b>Static vapor sample collected on 7/6/00.</b>												
7/6/00	8:06	2,312	0	0	0	0.0	0.13	-	-	-	-	-
<b>Vapor sample collected on 9/14/00.</b>												
9/14/00	11:08	3,788	0	0	0	0.5	0.29	-	-	-	-	-
<b>Static vapor sample collected on 9/28/00.</b>												
9/28/00	8:51	3,788	0	0	0	1.3	0.47	-	-	-	-	-
10/26/00	8:00	4,301	0	0	0	13	-	-	-	-	-	-
<b>Static vapor sample collected on 1/4/01.</b>												
1/4/01	9:15	4,940	0	0	0	0.9	0.93	-	-	-	-	-
<b>VMP-1 converted to extraction well on 3/8/01.</b>												
3/8/01	7:30	5,343	-	-	145	6.4	-	-	-	-	-	-
3/15/01	13:00	5,516	-	-	145	1.9	-	-	-	-	-	-
3/22/01	13:00	5,682	-	-	145	4.1	-	-	-	-	-	-
3/29/01	14:30	5,854	-	-	140	3.8	-	-	-	-	-	-
4/5/01	10:00	6,016	-	-	140	26	-	-	-	-	-	-
4/11/01	9:00	6,160	-	-	140	3.2	-	-	-	-	-	-
4/18/01	12:30	6,331	-	-	135	1.5	-	-	-	-	-	-
4/25/01	13:15	6,500	-	-	133	2.9	-	-	-	-	-	-
5/2/01	11:45	6,666	-	-	135	2.3	-	-	-	-	-	-
5/9/01	12:30	6,836	-	-	135	3.0	-	-	-	-	-	-
5/16/01	11:45	7,002	14	8.9	140	2.3	-	-	-	-	-	-
5/23/01	11:00	7,169	11	7.2	140	2.1	-	-	-	-	-	-
5/31/01	14:43	7,360	4.5	3.0	140	8.5	9.7	0.014	0.022	1.2	1.9	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												
6/14/01	9:33	7,360	4.4	3.1	113	0.1	0.27	-	-	-	-	-
6/20/01	12:30	7,515	14	9.6	130	1.0	-	-	-	-	-	-

**TABLE 4e**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.												
6/28/01	6:30	7,540	30	24	79	8.8	-					

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using the current mass removal rate.
5. Well VMP-1 was first used as an extraction well on 8 March 2001.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well VMP-1 is screened in the shallow vadose zone from 19 to 25 feet below ground surface.

**TABLE 4f**  
**Soil Vapor Extraction Data: Extraction Well SVE-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	8:57	5.6	3.7	3.6	6.0	1,580	1,000	1.8	1.9	0	0	
<b>System startup on 3/16/00 at 16:00.</b>												
3/17/00	7:00	20.3	4.6	4.5	10	92	-					
3/18/00	6:30	44.7	5.3	5.2	10	131	-					
<b>System shut down on 3/18/00 at 9:40. System restarted on 3/19/00 at 6:30.</b>												
3/19/00	6:30	48	0.0	0.0	0.0	30	0					
3/20/00	6:30	72	5.8	5.7	9.0	164	0					
3/21/00	7:00	96	2.6	2.6	7.0	560	0					
3/22/00	7:30	121	8.9	8.6	15	70	440	1.9	2.0	8.8	9.1	4A
3/30/00	11:00	316	24	22	38	36	0					
4/6/00	11:00	483	25	17	125	30	0					
4/13/00	8:00	648	33	21	150	33	25	0.26	0.28	32	34	4A
4/20/00	7:30	815	28	18	145	28	0					
4/27/00	7:00	983	18	16	40	25	0					
5/4/00	8:30	1,152	16	10	135	20	0					
5/11/00	6:30	1,318	13	9.7	95	13	0					
5/18/00	7:00	1,486	20	14	120	37	8.6	0.061	0.070	38	40	4A
			26	17	150	37	-	0.071	0.081	-	-	
5/25/00	6:30	1,654	18	11	150	16	-					
6/1/00	6:30	1,822	16	10	150	31	-					
6/8/00	7:00	1,990	21	13	155	31	-					
6/15/00	7:30	2,158	21	13	150	31	-					
<b>System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.</b>												
7/6/00	9:34	2,312	0	0	0	30	92	-	-	-	-	
<b>System restarted on 7/6/00 at 10:00.</b>												
7/13/00	12:00	2,485	34	22	145	37	5.1	0.056	0.25	40	47	4A
7/20/00	7:30	2,648	32	20	150	27	-					
<b>System shut down on 7/26/00 at 6:30. System restarted on 7/27/00 at 6:00.</b>												
7/27/00	6:00	2,791	26	17	140	9.4	-					
8/3/00	8:00	2,961	26	17	140	1.5	-					
8/8/00	14:30	3,086	26	17	140	1.8	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>												

**TABLE 4f**  
**Soil Vapor Extraction Data: Extraction Well SVE-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
8/24/00	12:30	3,226	27	18	140	17	-					
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	21	15	120	8.9	-					
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	22	15	125	5.8	-					
9/14/00	9:00	3,788	20	13	140	24	4.0	0.026	0.23	43	60	4A
<b>System shut down on 9/14/00 at 11:23.</b>												
9/28/00	10:25	3,788	52	36	120	62	120	-	-	-	-	
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	29	21	120	41	-					
10/12/00	8:00	3,964	28	20	120	72	-					
10/19/00	8:00	4,132	19	14	120	6.2	-					
10/26/00	8:00	4,301	20	14	115	5.8	2.4	0.017	0.081	43	63	4A
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												
11/2/00	8:00	4,422	22	15	140	1.5	-					
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>												
11/9/00	7:30	4,433	22	15	140	4.9	-					
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>												
11/16/00	10:00	4,441	24	15	140	38	-					
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>												
11/23/00	7:30	4,443	24	16	140	29	-					
11/30/00	7:30	4,611	-	-	140	23	-					
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>												
12/7/00	8:00	4,768	-	-	140	12	-					
12/14/00	10:30	4,940	16	11	140	3.1	2.7	0.014	0.025	44	64	4A
<b>System shut down on 12/14/00 at 12:15.</b>												
1/4/01	10:48	4,940	74	52	120	43	41	-	-	-	-	

**TABLE 4f**  
**Soil Vapor Extraction Data: Extraction Well SVE-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>System restarted on 2/19/01 at 15:45.</b>												
2/19/01	15:45	4,940	23	15	140	43	-					
2/22/01	17:00	5,016	24	15	140	37	-					
3/1/01	12:45	5,180	24	15	140	81	-					
3/8/01	7:30	5,343	23	15	145	103	-					
3/15/01	13:00	5,516	22	14	145	9.4	-					
3/22/01	13:00	5,682	21	14	145	12	-					
3/29/01	14:30	5,854	21	14	130	10	-					
4/5/01	10:00	6,016	22	14	140	31	-					
4/11/01	9:00	6,160	24	16	140	23	-					
4/18/01	12:30	6,331	25	17	135	23	-					
4/25/01	13:15	6,500	25	17	133	18	-					
5/2/01	11:45	6,666	25	16	135	17	-					
5/9/01	12:30	6,836	23	15	135	6.2	-					
5/16/01	11:45	7,002	25	16	140	6.0	-					
5/23/01	11:00	7,169	26	17	140	5.8	-					
5/31/01	15:20	7,360	17	11	140	4.5	6.4	0.035	0.041	46	68	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												
6/14/01	10:33	7,360	52	38	112	106	140	-	-	-	-	
6/20/01	12:30	7,515	13	8.8	130	8.9	-					
<b>System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.</b>												
6/28/01	6:30	7,540	66	54	78	24	-					

**TABLE 4f**  
**Soil Vapor Extraction Data: Extraction Well SVE-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acfm to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. On days for which two flow and vacuum readings are provided, the values indicate initial and final readings during the site visit.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well SVE-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well SVE-D1 is screened in the shallow vadose zone from 30 to 40 feet below ground surface.

**TABLE 4g**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	10:32	5.6	0	0	0	282	460					
<b>System startup on 3/16/00 at 16:00 with VMP-D1 used as a monitoring well.</b>												
4/6/00	11:00	483	0	0	0	3.5	-					
4/13/00	8:00	648	0	0	0	23	-					
<b>System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.</b>												
7/6/00	8:57	2,312	35	24	130	30	9.4	0.11	0.12	0	0	
<b>System restarted on 7/6/00 at 10:00 with VMP-D1 operating as an extraction well.</b>												
7/13/00	12:00	2,485	33	21	145	3.6	0					
7/20/00	7:30	2,648	34	22	150	3.2	-					
7/27/00	6:00	2,791	26	17	140	9.4	-					
8/3/00	8:00	2,961	25	16	140	1.5	-					
8/8/00	14:30	3,086	24	16	140	1.6	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>												
8/24/00	12:30	3,326	22	15	140	2.1	-					
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	19	14	120	0.9	-					
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	20	14	125	0.2	-					
9/14/00	9:00	3,788	20	-	140	1.2	1.4	0.0090	0.012	3.7	4.2	4A
<b>System shut down on 9/14/00 at 11:23.</b>												
9/28/00	10:08	3,788	59	41	120	6.3	8.6	-	-	-	-	
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	25	18	120	8.4	-					
10/12/00	8:00	3,964	24	17	120	6.7	-					
10/19/00	8:00	4,132	25	17	120	9.4	-					
10/26/00	8:00	4,301	22	16	115	24	-					
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												

**TABLE 4g**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	26	17	140	0	-					
<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>												
11/9/00	7:30	4,433	-	-	140	59	-					
<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>												
11/16/00	10:00	4,441	64	42	140	8.6	-					
<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>												
11/23/00	7:30	4,443	60	40	140	87.4	-					
11/30/00	7:30	4,611	39	26	140	27.9	-					
<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>												
12/7/00	8:00	4,768	42	27	140	29.3	-					
12/14/00	10:30	4,940	15	10	140	0.3	0.95	0.0047	0.0065	4.0	4.6	4A
<b>System shut down on 12/14/00 at 12:15.</b>												
1/4/01	9:57	4,940	76	53	120	0.6	1.6	-	-	-	-	
<b>System restarted on 2/19/01 at 15:45.</b>												
2/19/01	15:45	4,940	22	15	140	1.2	-					
2/22/01	17:00	5,016	23	15	140	0.0	-					
3/1/01	12:45	5,180	18	12	140	0.0	-					
3/8/01	7:30	5,343	19	12	145	0.0	-					
3/15/01	13:00	5,516	18	12	145	0.8	-					
3/22/01	13:00	5,682	19	12	145	0.2	-					
3/29/01	14:30	5,854	19	13	140	0.6	-					
4/5/01	10:00	6,016	28	19	140	0.9	-					
4/11/01	9:00	6,160	19	12	140	0.4	-					
4/18/01	12:30	6,331	25	17	135	0.5	-					
4/25/01	13:15	6,500	22	15	133	2.0	-					
5/2/01	11:45	6,666	28	19	135	2.5	-					
5/9/01	12:30	6,836	29	20	135	0.0	-					
5/16/01	11:45	7,002	24	16	140	0.0	-					
5/23/01	11:00	7,169	25	16	140	0.0	-					
5/31/01	14:54	7,360	11	7.5	140	0.8	1.1	0.0041	0.0066	4.4	5.3	4A
<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>												

**TABLE 4g**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D1**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
6/14/01	9:50	7,360	47	33	115	2.7	5.7	-	-	-	-	-
6/20/01	12:30	7,515	14	9.3	130	0.6	-	-	-	-	-	-
System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.												
6/28/01	6:30	7,540	26	21	78	6.3	-	-	-	-	-	-

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acf m to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. Well VMP-D1 was first used as an extraction well on 6 July 2000.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D1. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well VMP-D1 is screened in the deep vadose zone from 30 to 40 feet below ground surface.

**TABLE 4h**  
***Soil Vapor Extraction Data:***  
***Monitoring/Extraction Well VMP-D2***

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
<b>Static vapor sample collected on 3/16/00.</b>												
3/16/00	10:50	5.6	0	0	0	76	39					
<b>System startup on 3/16/00 at 16:00 with VMP-D2 used as a monitoring well.</b>												
4/6/00	11:00	483	0	0	0	150	-					
4/13/00	8:00	648	0	0	0	27	-					
<b>System shut down on 6/21/00 at 17:30. Static vapor sample collected on 7/6/00.</b>												
7/6/00	9:12	2,312	44	30	130	5.2	5.7	0.085	0.10	0	0	
<b>System restarted on 7/6/00 at 10:00 with VMP-D2 operating as an extraction well.</b>												
7/13/00	12:00	2,485	41	26	145	5.8	-					
7/20/00	7:30	2,648	42	27	150	3.8	-					
7/27/00	6:00	2,791	21	14	140	8.7	-					
8/3/00	8:00	2,961	21	14	140	4.8	-					
8/8/00	14:30	3,086	22	14	140	4.3	-					
<b>System shut down on 8/15/00 at 11:30. System restarted on 8/21/00 at 10:30.</b>												
8/24/00	12:30	3,326	26	17	140	8.8	-					
<b>System shut down on 8/30/00 at 13:30. System restarted on 8/31/00 at 9:00.</b>												
8/31/00	9:00	3,471	18	13	120	1.5	-					
<b>System shut down on 9/6/00 at 15:00. System restarted on 9/7/00.</b>												
9/7/00	10:30	3,621	17	12	125	0.6	-					
9/14/00	9:00	3,788	17	11	140	9.6	0.71	0.0040	0.038	2.8	4.4	4A
<b>System shut down on 9/14/00 at 11:23.</b>												
9/28/00	9:35	3,788	42	29	125	39	9.3	-	-	-	-	
<b>System restarted on 10/1/00 at 6:30.</b>												
10/1/00	6:30	3,791	-	-	-	-	-					
<b>System shut down on 10/1/00 at 10:30. System restarted on 10/5/00 at 7:30.</b>												
10/5/00	7:30	3,795	23	16	120	24	-					
10/12/00	8:00	3,964	26	18	120	9.1	-					
10/19/00	8:00	4,132	25	18	120	10	-					
10/26/00	8:00	4,301	19	14	115	26	-					
<b>System shut down on 10/31/00 at 9:20. System restarted on 11/2/00 at 8:00.</b>												

**TABLE 4h**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acfm)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
11/2/00	8:00	4,422	23	15	140	0	-	-	-			
			<b>System shut down on 11/2/00 at 19:00. System restarted on 11/9/00 at 7:30.</b>									
11/9/00	7:30	4,433	-	-	140	14	-	-	-			
			<b>System shut down on 11/9/00 at 15:30. System restarted on 11/16/00 at 10:00.</b>									
11/16/00	10:00	4,441	-	-	140	15	-	-	-			
			<b>System shut down on 11/17/00 at 12:00. System restarted on 11/23/00 at 7:30.</b>									
11/23/00	7:30	4,443	47	31	140	63	-	-	-			
11/30/00	7:30	4,611	28	18	140	45	-	-	-			
			<b>System shut down on 12/6/00 at 21:00. System restarted on 12/7/00 at 8:00.</b>									
12/7/00	8:00	4,768	11	7.4	140	40	-	-	-			
12/14/00	10:30	4,940	18	12	140	14	1.3	0.0078	0.091	3.0	7.5	4A
			<b>System shut down on 12/14/00 at 12:15.</b>									
1/4/01	9:57	4,940	78	55	120	3.4	3.0	-	-	-	-	
			<b>System restarted on 2/19/01 at 15:45.</b>									
2/19/01	15:45	4,940	21	14	140	73.4	-	-	-			
2/22/01	17:00	5,016	21	14	140	81.9	-	-	-			
3/1/01	12:45	5,180	20	13	140	185.4	-	-	-			
3/8/01	7:30	5,343	22	14	145	153.3	-	-	-			
3/15/01	13:00	5,516	24	15	145	5.2	-	-	-			
3/22/01	13:00	5,682	15	10	145	3.2	-	-	-			
3/29/01	14:30	5,854	19	13	140	2.6	-	-	-			
4/5/01	10:00	6,016	17	11	140	4.7	-	-	-			
4/11/01	9:00	6,160	23	15	140	4.1	-	-	-			
4/18/01	12:30	6,331	22	15	135	5.0	-	-	-			
4/25/01	13:15	6,500	29	19	133	3.9	-	-	-			
5/2/01	11:45	6,666	27	18	135	3.4	-	-	-			
5/9/01	12:30	6,836	28	19	135	3.1	-	-	-			
5/16/01	11:45	7,002	26	17	140	2.9	-	-	-			
5/23/01	11:00	7,169	29	19	140	1.7	-	-	-			
5/31/01	15:15	7,360	14	9.2	140	12	11	0.050	0.083	6.0	16	4A
			<b>System shut down on 5/31/01 at 16:35. System restarted on 6/14/01 at 8:00.</b>									

**TABLE 4h**  
**Soil Vapor Extraction Data:**  
**Monitoring/Extraction Well VMP-D2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	Time	Elapsed Time on Hour Meter (hrs)	Flow		Vacuum (in-wc)	Total VOCs by PID (ppmv)	TCE Conc. by Lab (ppmv)	Estimated VOC Removal Rates		Cumulative Mass Removal		
			(acf m)	(scfm)				TCE (lb/day)	Total VOCs (lb/day)	TCE (lbs)	Total VOCs (lbs)	Notes
6/14/01	10:15	7,360	42	30	110	3.0	5.4	-	-	-	-	-
6/20/01	12:30	7,515	16	11	130	4.8	-	-	-	-	-	-
System shut down on 6/21/01 at 14:30. System restarted on 6/28/01 at 6:30.												
6/28/01	6:30	7,540	21	17	80	13	-	-	-	-	-	-

**NOTES:**

TCE = trichloroethene

acf m = actual cubic feet per minute

°F = degrees Fahrenheit

hrs = hours

in-wc = inches of water column

lb/day = pounds per day

lbs = pounds

PID = photoionization detector

ppmv = parts per million by volume

scfm = standard cubic feet per minute

tr = trace (concentration detected at less than reporting limit)

VOCs = volatile organic compounds

- = no measurement

< = not detected at indicated method detection limit

1. PID calibrated with 100 ppmv of isobutylene.
2. Laboratory analyses were performed by Performance Analytical, Inc. in Simi Valley, California using EPA Method TO-14A.
3. Removal rates are calculated using analyte concentrations from laboratory analyses and the measured flow rate (converted from acf m to scfm using the measured vacuum).
4. Cumulative mass removal amounts are calculated as follows:
  - A: Mass removal calculated using an average of the previous and current mass removal rates.
5. Well VMP-D1 was first used as an extraction well on 6 July 2000.
6. Although not shown on this table, mass removal rates were calculated for each VOC detected in the samples collected from well VMP-D2. The total VOC mass removal rate presented in this table is the sum of the mass removal rates calculated for each VOC that was detected.
7. Extraction well VMP-D2 is screened in the deep vadose zone from 30 to 40 feet below ground surface.

**TABLE 5**  
**Field Data for Soil Vapor Monitoring Probes**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Date	VMP-1		VMP-2		VMP-D1		VMP-D2	
	Vacuum (in-wc)	Total VOCs by PID <sup>(1,2)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,2)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,3)</sup> (ppmv)	Vacuum (in-wc)	Total VOCs by PID <sup>(1,3)</sup> (ppmv)
3/16/00	-	68	-	150	-	530	-	71
3/17/00	1.8	-	1.0	-	4.7	-	5.2	-
3/18/00	1.3	-	1.1	-	6.6	-	6.0	-
3/19/00	1.1	-	0.7	-	2.2	-	2.4	-
3/20/00	2.1	-	1.4	-	2.6	-	3.5	-
3/21/00	2.4	-	2.2	-	5.4	-	6.8	-
3/22/00	2.6	-	2.3	-	5.8	-	4.5	-
3/30/00	1.8	-	1.8	-	15	-	16	-
4/6/00	2.8	6.4	4.2	7.4	23	3.5	24	150
4/13/00	4.0	8.2	2.5	6.2	21	23	22	27
5/11/00	4.6	-	4.0	-	19	-	16	-
	3.2	-	3.4	-	17	-	18	-
5/18/00	3.8	-	2.7	-	21	-	22	-
7/6/00	-	0.0	-	2.6	-	-	-	-
7/13/00	2.6	-	1.9	-	-	-	-	-
7/20/00	2.9	-	2.1	-	-	-	-	-
7/27/00	2.6	-	1.9	-	-	-	-	-
9/14/00	5.2	0.5	2.4	0.7	-	-	-	-
9/28/00	-	1.3	-	2.4	-	-	-	-
10/26/00	11.5	13.2	11.5	2.2	-	-	-	-
12/14/00	7.3	-	0.6	-	-	-	-	-
1/4/01	-	0.9	-	0.4	-	-	-	-
6/14/01	-	-	0.1	0.0	-	-	-	-

**NOTES:**

in-wc = inches of water column

PID = photoionization detector

ppmv = parts per million by volume

VOCs = volatile organic compounds

- = no measurement

1. PID calibrated with 100 ppmv of isobutylene.
2. Each shallow vapor monitoring probe was purged of approximately 5 to 7 cubic feet of vapor and then sampled and analyzed using a PID.
3. Each deep vapor monitoring probe was purged of approximately 50 to 65 cubic feet of vapor and then sampled and analyzed using a PID.
4. On days for which two vacuum and PID readings are provided, the values indicate initial and final readings during the site visit.
5. Probes VMP-D1 and VMP-D2 have been used as extraction wells since 6 July 2000.  
For data collected at wells VMP-D1 and VMP-D2, see Tables 4f and 4g, respectively.
6. Probe VMP-1 has been used as an extraction well since 8 March 2001 (see Table 4h).
7. Soil vapor monitoring probes VMP-1 and VMP-2 are screened in the shallow vadose zone from approximately 19 to 25 feet beneath the ground surface.
8. Soil vapor monitoring probes VMP-D1 and VMP-D2 are screened in the deep vadose zone from approximately 30 to 40 and 31 to 41 feet beneath the ground surface, respectively.

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)															Other
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene		
Blower Influent	3/16/00	N	<21	<16	<16	8.2 tr	<13	<12	<14	<17	19	<9.2	860	49	<12	<12	-	
	3/22/00	Y	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	11	3.0 tr	490	3.9 tr	<4.6	<4.6	-	
	4/13/00	Y	<2.1	<1.6	7.7	0.76 tr	<1.3	<1.2	0.91 tr	0.90 tr	1.2	<0.92	70	2.1	<1.2	<1.2	-	
	DUP	Y	<2.1	<1.6	8.5	0.72 tr	<1.3	<1.2	<1.4	<1.7	1.1	<0.92	65	1.8	<1.2	<1.2	-	
	5/18/00	Y	<2.1	<1.6	<1.6	<1.3	<1.3	<1.2	<1.5	<1.7	2.2	<0.93	53	<1.3	<1.2	<1.2	-	
	7/6/00	N	2.2	0.56 tr	1.6	0.51	<0.51	<0.46	0.48 tr	<0.68	0.82	0.19 tr	37	<0.53	0.50	<0.46	Bromomethane 0.37 tr Chloroform 0.37 tr CFC-11 0.35 tr CFC-113 0.38 1,1-DCA 0.26 tr	
	7/13/00	Y	<0.84	10	<0.64	0.36 tr	<0.51	0.66	<0.58	<0.68	0.82	<0.37	18	<0.53	0.67	<0.46	-	
	9/14/00	Y	<0.21	10	<0.16	0.27	<0.13	0.20	<0.14	<0.17	0.25	<0.09	5.6	0.75	0.62	0.14	-	
	9/28/00	N	<0.84	14	<0.64	0.48 tr	<0.50	0.75	<0.58	<0.68	0.95	<0.37	54	1.0	1.2	0.28 tr	-	
	10/26/00	Y	<0.08	3.8	<0.06	0.10	<0.05	0.14	<0.06	<0.07	0.23	<0.04	2.3	0.36	0.43	0.16	-	
	12/14/00	Y	<0.17	4.1	<0.13	0.16	<0.10	0.16	<0.12	<0.14	1.4	<0.073	6.7	0.47	0.50	0.29	1,2-DCB 0.048 tr	
	1/4/01	N	<1.1	1.3	<0.80	<0.63	<0.63	<0.58	<0.72	<0.85	0.42	<0.46	30	0.45 tr	0.32 tr	<0.58	-	
	5/31/01	Y	<0.28	1.4	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	1.8	<0.12	6.8	<0.18	<0.15	<0.15	-	
	DUP	Y	<0.28	1.5	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	1.8	<0.12	7.0	<0.18	<0.15	<0.15	-	
	6/14/01	N	<1.1	<0.78	<0.80	<0.63	<0.63	<0.58	0.90	<0.85	0.75	<0.46	46	<0.66	<0.58	<0.58	-	
	DUP	N	<1.1	<0.78	<0.80	<0.63	<0.63	<0.58	0.73	<0.85	0.74	<0.46	44	<0.66	<0.58	<0.58	-	

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)														
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other
SVE-1	3/16/00	N	<210	<160	<160	<130	<130	<120	<140	<170	230	53 tr	10,000	170	<120	<120	-
	3/22/00	Y	<84	<63	<64	<50	<50	<46	<58	<68	140	43	10,000	42 tr	<46	<46	-
	4/13/00	Y	<210	<160	<160	<130	<130	<120	<140	<170	120	<92	6,500	<130	<120	<120	-
	5/18/00	Y	<17	<13	<13	<10	<10	<9.2	<12	<14	94	7.3 tr	3,700	<11	<9.2	<9.2	-
	7/6/00	N	<42	<31	63	<25	<25	<23	<29	<34	110	<19	3,300	<27	<23	<23	-
	7/13/00	Y	<21	<16	<16	<13	<13	<12	<15	<17	60	<9.3	2,200	<13	<12	<12	-
	9/14/00	Y	<17	<13	<13	<10	<10	<9.2	<12	<14	9.1	<7.3	300	6.7 tr	5.1 tr	<9.2	-
	9/28/00	N	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	7.1	<3.7	230	<5.3	<4.6	<4.6	-
	10/26/00	Y	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	3.9	<1.8	140	<2.7	<2.3	<2.3	-
	12/14/00	Y	3.1 tr	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	8.1	<1.8	260	4.3	<2.3	<2.3	-
	1/4/01	N	<8.4	<6.3	<6.4	<5.0	<5.0	<4.6	<5.8	<6.8	5.5	<3.7	350	<5.3	<4.6	<4.6	-
	5/31/01	Y	<0.28	1.1	<0.21	<0.17	<0.17	<0.15	<0.19	<0.23	3.3	<0.12	7.8	<0.18	<0.15	<0.15	-
	6/14/01	N	<0.42	<0.31	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	3.9	<0.18	11	<0.27	<0.23	<0.23	-
SVE-2	3/16/00	N	<1.7	<1.3	<1.3	0.72 tr	<1.0	<0.92	<1.2	<1.4	1.2	<0.73	75	<1.1	<0.92	<0.92	-
	DUP	N	<1.7	<1.3	<1.3	0.80 tr	<1.0	<0.92	<1.2	<1.4	1.5	<0.73	96	1.3	<0.92	<0.92	-
	7/6/00	N	<4.2	<3.1	6.6	<2.5	<2.5	<2.3	<2.9	<3.4	3.6	<1.9	120	<2.7	<2.3	<2.3	Chloroform
	9/14/00	Y	<2.1	<1.6	<1.6	<1.3	<1.3	<1.2	<1.4	<1.7	0.98	<0.92	77	<1.3	<1.2	<1.2	-
	9/28/00	N	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.4 tr	<1.8	110	<2.7	<2.3	<2.3	-
	12/14/00	Y	0.40 tr	<0.31	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	0.74	<0.18	29	1.1	<0.23	<0.23	-
	1/4/01	N	<1.1	<0.78	<0.80	<0.63	<0.63	<0.58	<0.72	<0.85	0.65	<0.46	34	<0.66	<0.58	<0.58	-
	5/31/01	Y	<0.42	0.83	<0.32	<0.25	<0.25	<0.23	<0.29	<0.34	1.2	<0.18	10	<0.27	<0.23	<0.23	-
	6/14/01	N	<0.84	<0.63	<0.64	<0.50	<0.50	<0.46	<0.58	<0.68	0.52	<0.37	22	<0.53	<0.46	<0.46	-
SVE-3	3/16/00	N	<0.84	<0.63	<0.64	0.56	<0.50	<0.46	<0.58	<0.68	2.7	<0.37	25	<0.53	<0.46	<0.46	-
	7/6/00	N	<0.21	<0.16	<0.16	0.19	<0.13	<0.12	<0.15	0.19	3.7	<0.093	7.4	<0.13	<0.12	<0.12	-
	9/14/00	Y	<0.08	<0.06	<0.06	0.11	<0.05	<0.05	<0.06	<0.07	2.2	0.07	2.5	0.06	0.08	0.03 tr	-
	9/28/00	N	<0.21	<0.16	<0.16	0.16	<0.13	<0.12	<0.14	0.56	3.8	0.095	3.8	<0.13	<0.12	<0.12	MTBE
	12/14/00	Y	<0.042	<0.031	<0.032	0.035	<0.025	<0.023	<0.029	<0.034	1.4	0.038	1.2	0.070	<0.023	<0.023	0.031
	1/4/01	N	<0.084	<0.063	<0.064	0.034 tr	<0.050	<0.046	<0.058	<0.068	1.4	0.036 tr	1.3	<0.053	<0.046	<0.046	-
	5/31/01	Y	<0.21	1.1	<0.16	0.13	<0.13	<0.12	<0.14	<0.17	1.8	<0.092	5.0	<0.13	0.13	<0.12	-
	6/14/01	N	<0.042	<0.031	<0.032	0.033	<0.025	0.032	<0.029	0.58	0.59	<0.018	1.6	0.093	0.16	0.067	-

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)															Other
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene		
VMP-1	3/16/00	N	<0.84 0.022	<0.63 0.0011 tr	<0.64 0.0043	0.58 0.011	<0.50 <0.0013	<0.46 0.0015	<0.58 0.0010 tr	0.012	1.0 0.0028	<0.37 0.0017	29 0.13	<0.53 0.0045	<0.46 0.0085	<0.46 0.0039	Chloromethane Chloroform CFC-11 CFC-113 1,1-DCA MTBE 2-Hexanone Styrene	0.0021 tr 0.00054 tr 0.00081 tr 0.00060 tr 0.0023 0.0017 0.0090 0.0045 tr
	7/6/00	N																
	9/14/00	Y	0.097	0.0078	<0.0064	<0.0050	<0.0050	0.0041 tr	0.0033 tr	0.089	0.025	<0.0037	0.29	0.022	0.023	0.0010		
	9/28/00	N	0.071 <0.042	<0.013 <0.031	<0.013 <0.032	<0.010 <0.025	<0.010 <0.025	<0.0092 <0.023	<0.012 <0.029	0.061 <0.034	0.040 0.099	<0.0073 <0.018	0.47 0.93	0.0059 tr 0.022 tr	0.0087 tr 0.032	0.0046 tr 0.014 tr		
	1/4/01	N																
	5/31/01	Y	<0.42 0.42	2.4 0.42	0.42 0.32	<0.25 <0.25	<0.23 <0.30	<0.30 <0.34	<0.34 <0.019	2.8 0.029	<0.18 0.0051	9.7 0.27	<0.27 0.085	<0.23 0.12	<0.23 0.050			
	6/14/01	N	0.021 0.010	<0.0064 0.0086	<0.0050 <0.0050	<0.0050 <0.0058	<0.0058 <0.0058	0.016 0.018	<0.0058 0.018	0.018 0.049	0.049 0.0043	0.23 0.23	0.055 0.055	0.076 0.076	0.031 0.031			
VMP-2	3/16/00	N	<1.7 <0.14	<1.3 <0.10	<1.3 <0.11	<1.0 <0.085	<1.0 <0.085	<0.92 <0.077	<1.2 <0.097	<1.4 <0.11	2.0 0.24	<0.73 <0.062	43 5.2	1.5 <0.089	<0.92 <0.077	<0.92 <0.077		
	7/6/00	N																
	9/14/00	Y	0.25 0.0091	<0.0080 <0.0063	<0.0063 0.011	<0.0063 0.0050 tr	<0.0063 0.0040 tr	<0.0063 0.0040 tr	<0.0063 0.0021	<0.0063 0.18	<0.0063 0.011	<0.0063 0.52	<0.0063 0.52	<0.0063 0.027	<0.0063 0.027	<0.0063 0.012	2-Hexanone 4-Methyl-2-Pentanone Styrene	0.0018 0.0054 tr 0.0054 tr
	9/28/00	N	0.053 0.015	<0.013 <0.0078	<0.013 <0.0080	<0.010 <0.0063	0.010 0.0038 tr	<0.0092 0.0032 tr	<0.012 0.0072	0.050 0.0085	0.22 0.029	0.0070 tr <0.0046	0.52 0.13	0.0076 tr 0.015	0.013 0.014	0.0067 tr 0.0058	2-Hexanone MTBE	0.0076 tr 0.0037 tr
	1/4/01	N																
	5/31/01	Y	0.15 0.0048	<0.0016 <0.0013	<0.0013 <0.0013	<0.0013 <0.0013	<0.0013 0.0063	<0.0014 0.0063	<0.0014 0.018	0.051 0.024	0.024 0.0059	<0.0046 0.0059	0.057 0.057	0.024 0.057	0.031 0.024	0.013 0.031	2-Hexanone 4-Methyl-2-Pentanone	0.0060 0.0021
	6/14/01	N	0.057 0.0066	<0.0064 0.0064	<0.0050 0.0050	<0.0050 0.0058	<0.0058 0.016	<0.0058 0.018	<0.0058 0.018	0.018 0.049	0.049 0.0043	<0.0043 0.23	0.23 0.055	0.055 0.076	0.031 0.031			

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)														
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other
SVE-D1	3/16/00	N	<42	<31	<32	<25	<25	<23	<29	<34	16	<18	1,000	<27	<23	<23	-
	3/22/00	Y	<8.4	<6.3	<6.4	11	<5.0	<4.6	<5.8	<6.8	6.4	<3.7	440	3.2 tr	<4.6	<4.6	-
	4/13/00	Y	<1.1	<0.78	1.2	0.99	0.87	<0.58	<0.72	<0.85	0.28 tr	<0.46	25	0.40 tr	<0.58	<0.58	-
	5/18/00	Y	<0.42	0.19 tr	<0.32	0.30	0.30	<0.23	<0.29	<0.34	0.57	<0.19	8.6	<0.27	<0.23	<0.23	-
	7/6/00	N	5.3	<1.6	3.3	0.66 tr	<1.3	<1.2	<1.5	<1.7	1.6	<0.93	92	0.90 tr	<1.2	<1.2	Chloroform
	DUP	N	<2.1	<1.6	4.3	0.92 tr	<1.3	<1.2	<1.5	<1.7	1.5	<0.93	93	<1.3	<1.2	<1.2	Chloroform
																	CFC-11
																	CFC-113
																	0.79 tr
																	0.98 tr
																	0.67 tr
																	0.76
	7/13/00	Y	<0.42	25	<0.32	<0.25	<0.25	1.5	<0.29	<0.34	<0.15	<0.19	5.1	0.24 tr	1.4	<0.23	-
	9/14/00	Y	<0.84	40	<0.64	<0.50	<0.50	1.1	<0.58	<0.68	0.16 tr	<0.37	4.0	3.7	3.6	0.81	-
	DUP	Y	<0.84	32	<0.64	<0.50	<0.50	0.59	<0.58	<0.68	<0.30	<0.37	2.9	2.4	1.8	0.41 tr	-
	9/28/00	N	<4.2	21	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	0.96 tr	<1.8	120	<2.7	<2.3	<2.3	-
	DUP	N	<4.2	23	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	1.1 tr	<1.8	130	<2.7	<2.3	<2.3	-
	10/26/00	Y	<0.17	11	<0.13	<0.10	<0.10	0.31	<0.12	<0.14	0.05 tr	<0.07	2.4	1.0	1.1	0.44	-
	12/14/00	Y	<0.084	2.6	<0.064	<0.050	<0.050	<0.046	<0.058	<0.068	0.10	<0.037	2.7	0.19	0.20	0.14	-
	DUP	Y	<0.084	2.6	<0.064	<0.050	<0.050	<0.046	<0.058	<0.068	0.093	<0.037	2.7	0.18	0.17	0.12	-
	1/4/01	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.092	<1.2	<1.4	0.32 tr	<0.73	41	<1.1	<0.92	<0.092	-
	DUP	N	<1.7	<1.3	<1.3	<1.0	<1.0	<0.092	<1.2	<1.4	0.35 tr	<0.73	45	<1.1	<0.92	<0.092	-
	5/31/01	Y	<0.21	1.2	<0.16	<0.13	<0.13	<0.12	<0.14	<0.17	0.11	<0.092	6.4	0.14	0.18	<0.12	-
	6/14/01	N	<4.2	<3.1	<3.2	<2.5	<2.5	<2.3	<2.9	<3.4	<1.5	<1.8	140	<2.7	<2.3	<2.3	-
VMP-D1	3/16/00	N	<17	<13	<13	5.8 tr	<10	<9.2	<12	<14	8.3	<7.3	460	11	<9.2	<9.2	-
	7/6/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.15	1.5	0.17	<0.093	9.4	<0.13	<0.12	<0.12	-
	9/14/00	Y	<0.042	0.020 tr	<0.032	<0.025	0.039	0.013 tr	<0.029	<0.034	0.27	<0.018	1.4	0.061	0.081	0.037	Styrene
	9/28/00	N	<0.21	<0.16	<0.16	<0.13	<0.13	<0.12	<0.14	<0.17	0.38	<0.092	8.6	<0.13	<0.12	<0.12	-
	12/14/00	Y	<0.042	<0.031	<0.032	<0.025	0.022 tr	<0.023	<0.029	<0.034	0.25	<0.018	0.95	0.046	<0.023	<0.023	-
	1/4/01	N	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.030	<0.018	1.6	0.014 tr	0.020 tr	<0.023	-
	5/31/01	Y	<0.042	<0.031	<0.032	<0.025	<0.025	<0.023	<0.029	<0.034	0.40	<0.018	1.1	0.072	0.10	<0.023	Styrene
	6/14/01	N	<0.14	<0.10	<0.11	<0.084	<0.084	<0.077	0.13	<0.11	0.11	<0.061	5.7	<0.088	0.15	<0.077	-

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)														
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other
VMP-D2	3/16/00	N	<0.84	<0.63	<0.64	1.2	<0.50	<0.46	<0.58	<0.68	0.75	<0.37	39	0.83	<0.46	<0.46	-
	7/6/00	N	<0.21	<0.16	0.28	0.55	0.069 tr	<0.12	<0.15	0.34	0.35	<0.093	5.7	<0.13	<0.12	<0.12	1,1-DCA 0.067 tr
	9/14/00	Y	<0.08	5.6	<0.06	0.95	0.05 tr	0.20	<0.06	<0.07	0.14	<0.04	0.71	0.35	0.46	0.10	Chlorobenzene 0.29 Chloroform 0.60 1,1-DCA 0.08 1,2-DCB 0.02 tr 1,4-DCB 0.05 Styrene 0.03 tr
	9/28/00	N	<0.42	25	<0.32	1.1	<0.25	1.4	<0.29	<0.34	0.50	<0.18	9.3	2.2	2.3	0.27	Chlorobenzene 0.25
	12/14/00	Y	<0.17	9.9	<0.13	0.45	<0.10	0.46	<0.12	<0.14	3.6	<0.073	1.3	1.2	1.3	0.74	1,1-DCA 0.056 tr 1,2-DCB 0.13 1,4-DCB 0.079
	1/4/01	N	<0.11	1.8	<0.080	0.068	<0.063	0.12	<0.072	<0.085	0.17	<0.046	3.0	0.20	0.23	0.098	-
	5/31/01	Y	<0.42	2.7	0.45	0.37	<0.25	<0.23	<0.29	<0.34	3.8	<0.18	11	0.38	<0.23	<0.23	-
	6/14/01	N	<0.21	0.66	<0.16	0.16	<0.13	<0.12	0.26	<0.17	0.59	<0.092	5.4	<0.13	0.20	<0.12	-

**TABLE 6**  
*Summary of Laboratory Analytical Data for Soil Vapor Samples*

## Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

Location	Date	System Running?	Analyte Concentration (ppmv)															
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene	Other	
Equipment Blank	3/16/00	-	<0.042 0.0071	<0.031 0.00076	<0.032 0.0011	<0.025 <0.00025	<0.025 <0.00025	<0.023 0.00094	<0.029 0.00033	<0.034 0.0018	0.064 0.0016	<0.018 <0.00019	1.7 0.00042	<0.027 0.0037	<0.023 0.0062	<0.023 0.0029	-	Carbon Tel CFC-11 CFC-113 Chloromethane 1,2-DCB MTBE Styrene
	7/6/00	-															0.00014 tr 0.00046 0.00013 0.00077 0.00010 tr 0.0018 0.00028	
	9/14/00	-	0.016 0.0097	0.0055 0.0044	<0.0016 <0.0016	<0.0013 <0.0013	<0.0013 <0.0013	0.0038 0.0022	0.0076 0.0029	0.0044 0.0018	0.00047 tr 0.00047	<0.00092 0.00092	0.0013 0.014	0.021 0.011	0.022 0.012	0.010 0.0055	MTBE Styrene	0.0039 0.0059
	9/14/00	-															MTBE Styrene	
	9/28/00	-	0.0094 0.0094	0.0022 tr 0.0022	<0.0032 <0.0032	<0.0025 <0.0025	<0.0025 <0.0025	0.0021 tr 0.0021	0.027 0.0019	0.0019 tr 0.0019	<0.0015 <0.0018	<0.0018 <0.0019	0.0090 0.0090	0.014 0.014	0.0073 0.0073	MTBE Styrene	0.0032 0.0022 tr	
	9/28/00	-															MTBE Styrene	
	1/4/01	-	0.0078 0.015	0.0031 0.0019	<0.0032 <0.0016	<0.0025 <0.0013	<0.0025 <0.0013	0.0015 tr 0.0035	<0.0029 0.0027	<0.0034 0.0050	0.00093 tr <0.00074	<0.0018 <0.00092	0.015 0.0011	0.0052 0.018	0.0066 0.015	0.0031 0.0063	MTBE MTBE Styrene	0.0026 tr 0.0037 0.00061 tr
																	Vinyl Acetate Vinyl Chloride	
	1/4/01	-	0.014 0.0082	0.0016 0.0045	<0.0016 <0.0032	<0.0013 <0.0025	<0.0013 <0.0025	0.0019 0.0041	0.0021 0.0029	0.0016 tr 0.0034	0.00080 0.0051	<0.00092 0.0023	0.0085 0.012	0.013 0.017	0.0079 0.020	0.0032 0.0084	MTBE	0.0027
5/31/01	-																	
6/14/01	-		0.025 0.0082	0.0041 0.0045	<0.0032 <0.0032	<0.0025 <0.0025	<0.0025 <0.0025	0.0093 0.0052	<0.0034 0.0052	<0.0019 0.0019	<0.0018 <0.0018	0.075 0.075	0.034 0.044	0.044 0.019	0.019 MTBE	0.0044		

**TABLE 6**  
**Summary of Laboratory Analytical Data for Soil Vapor Samples**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

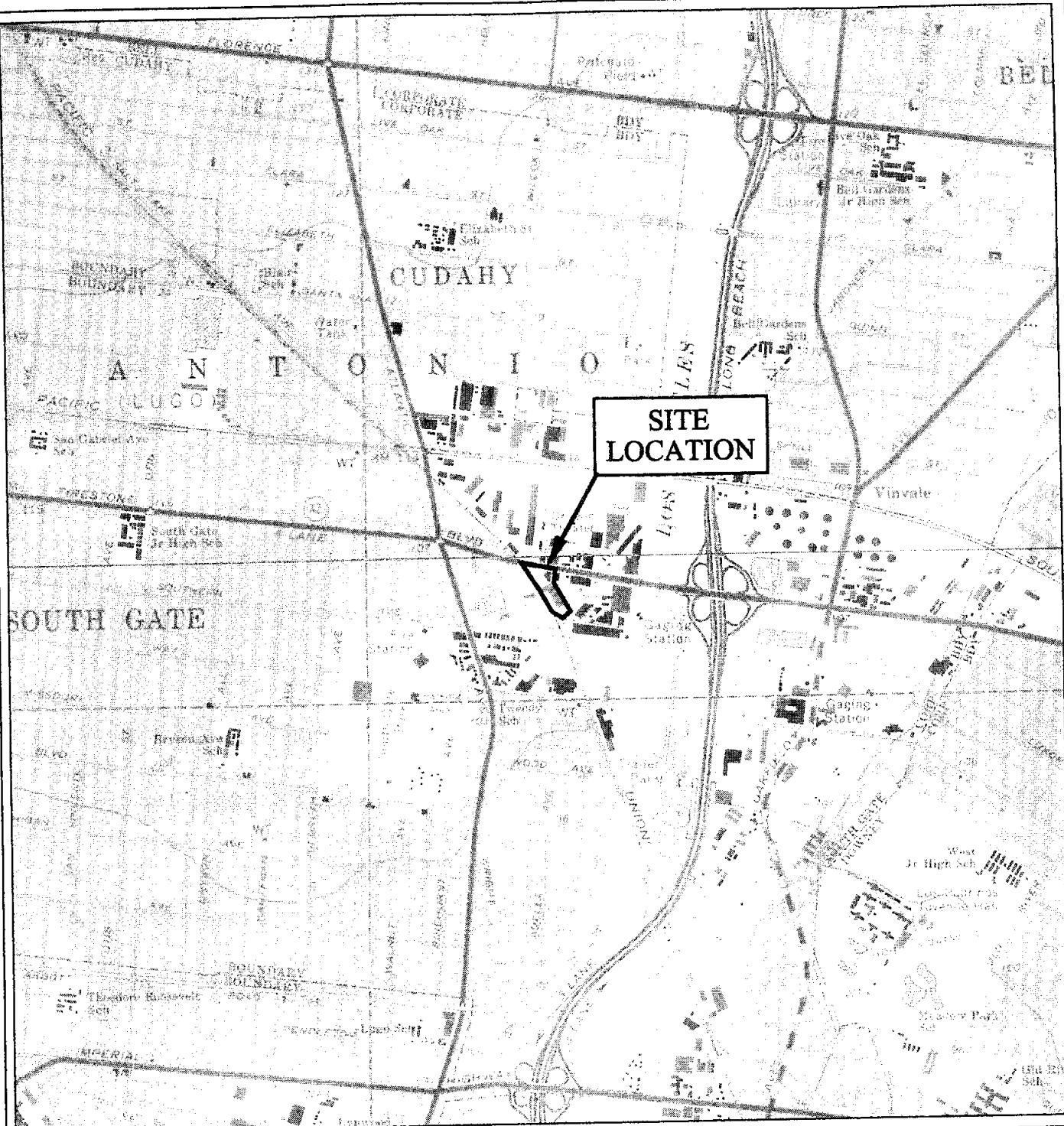
Location	Date	System Running?	Analyte Concentration (ppmv)													
			Acetone	Benzene	Carbon Disulfide	1,1-DCE	c-1,2-DCE	Ethylbenzene	Methylene Chloride	MEK	PCE	1,1,1-TCA	TCE	Toluene	m,p-Xylenes	o-Xylene

**NOTES:** Carbon Tet = Carbon tetrachloride  
 CFC-11 = Trichlorofluoromethane  
 CFC-113 = Trichlorotrifluoroethane  
 1,1-DCA = 1,1-Dichloroethane  
 1,2-DCB = 1,2-Dichlorobenzene  
 1,4-DCB = 1,4-Dichlorobenzene  
 1,1-DCE = 1,1-Dichloroethene

c-1,2-DCE = cis-1,2-Dichloroethene  
 MEK = Methyl ethyl ketone (aka 2-Butanone)  
 MTBE = Methyl tert-butyl ether  
 PCE = Tetrachloroethene  
 1,1,1-TCA = 1,1,1-Trichloroethane  
 TCE = Trichloroethene

DUP = Duplicate sample  
 ppmv = parts per million by volume  
 tr = trace (concentration detected at less than method detection limit)  
 ug/l = micrograms per liter  
 - = no measurement  
 < = not detected at indicated method detection limit

1. Samples were collected in Tedlar bags and analyzed by Performance Analytical, Inc., in Simi Valley, California, using EPA Method TO-14A.
2. Wells SVE-1, SVE-2, and SVE-3 are shallow zone extraction wells. Probes VMP-1 and VMP-2 are shallow zone monitoring probes.  
 Well SVE-D1 is a deep zone extraction well. Wells VMP-D1 and VMP-D2 have been used as deep zone extraction wells since 6 July 2000.  
 Wells VMP-D1 and VMP-D2 were used as deep zone monitoring probes prior to 6 July 2000.



N  
↑

0 2,000 4,000

(Approximate Scale in Feet)

**Erler & Kallnowski, Inc.**

Site Location Map

Jervis B. Webb Company of California  
South Gate, California

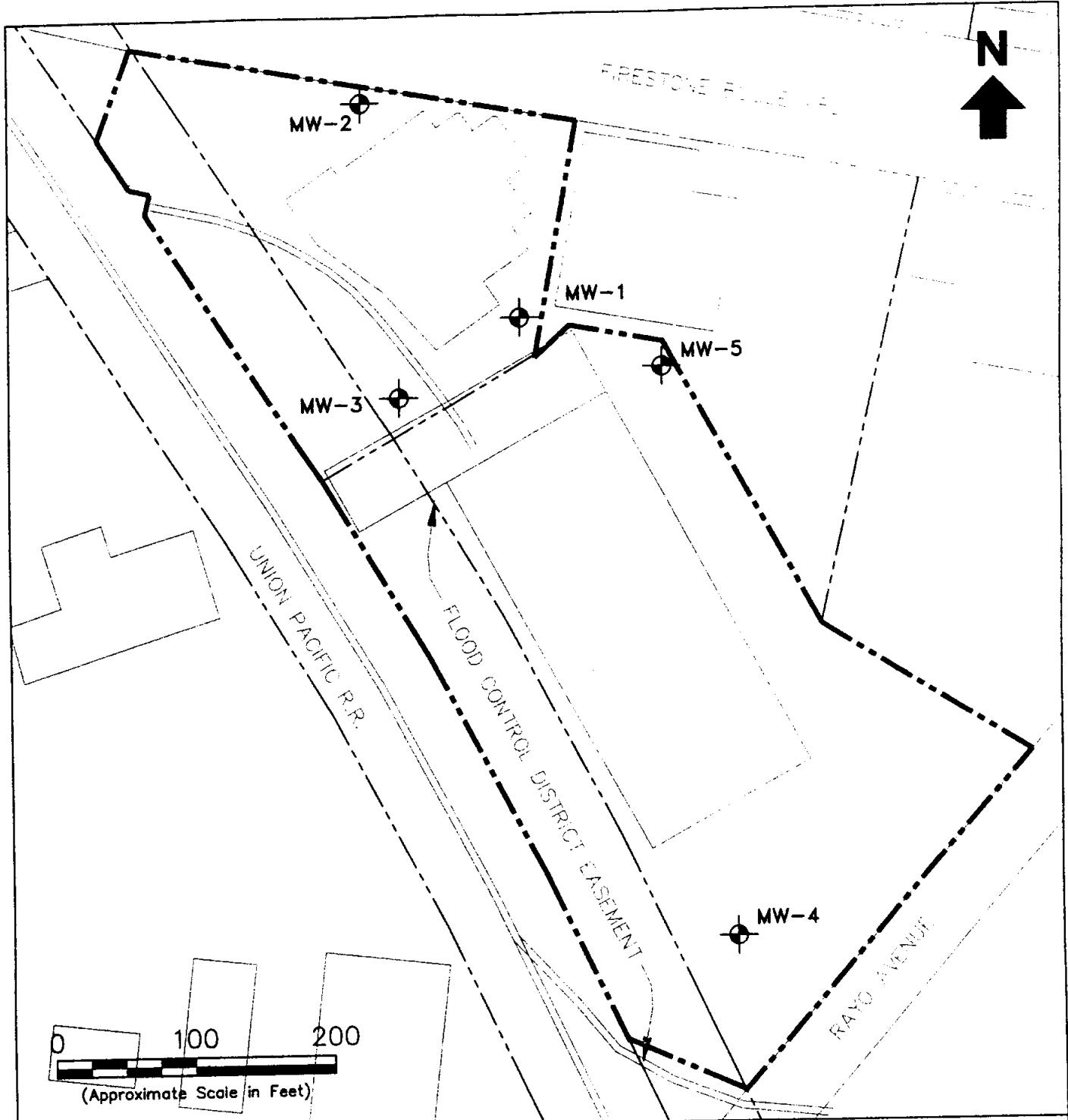
July 2001

EKI 991103.01

Figure 1

Source: U.S.G.S 7.5 Minute Series "South Gate"  
Quadrangle, 1964, photorevised 1981.

001684



#### LEGEND

- Groundwater Monitoring Well
- Property Line/Site Boundary

#### Notes:

- All locations are approximate.

**Erler & Kalinowski, Inc.**

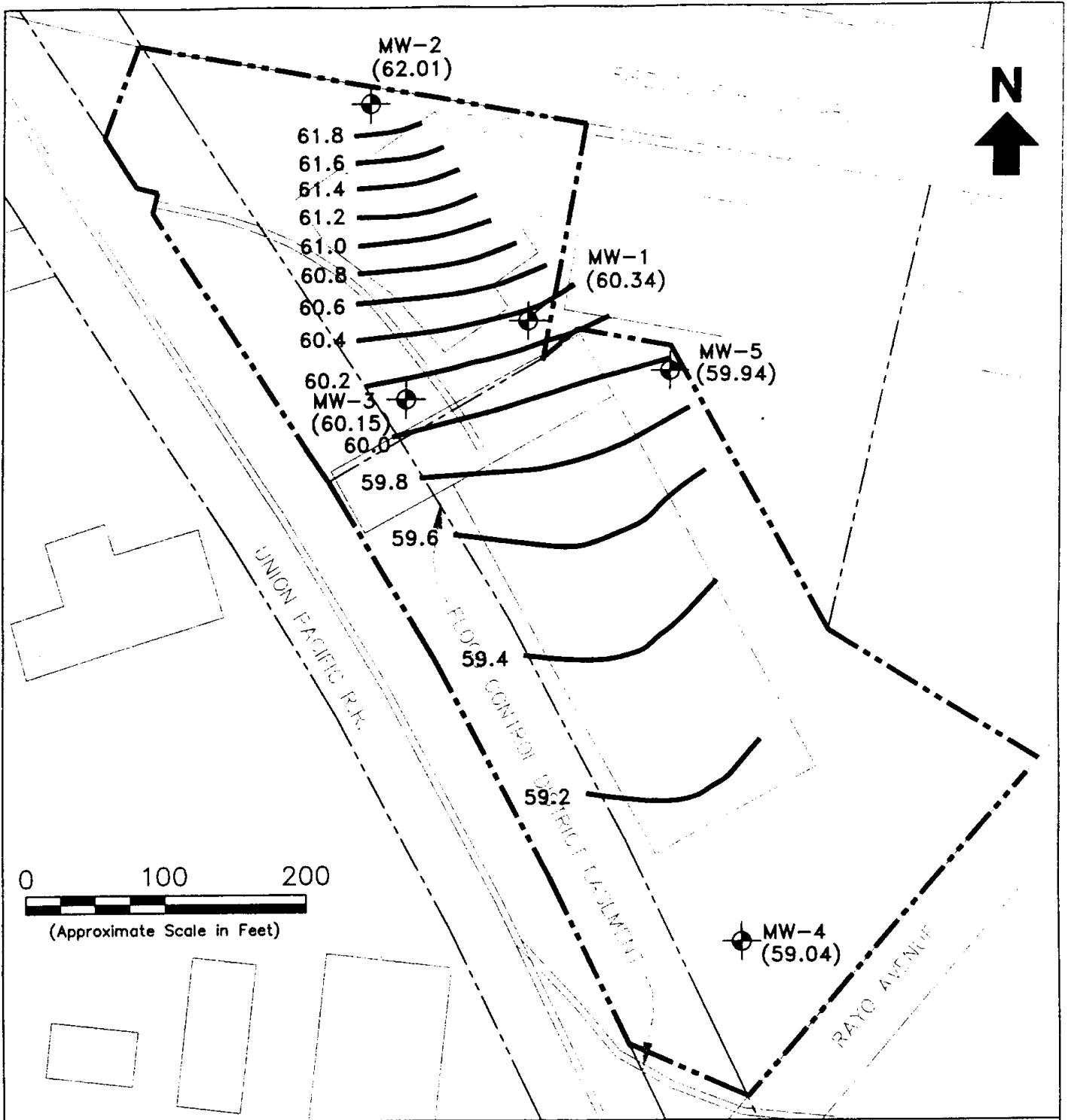
Groundwater Monitoring  
Well Locations

Jervis B. Webb Company of California  
South Gate, California

July 2001  
EKI 991103.01

Figure 2

001685



#### LEGEND

- 62.0 Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
- MW-3 Groundwater Monitoring Well with Groundwater Elevation (msl)
- Property Line/Site Boundary

#### Notes:

1. All locations are approximate.
2. NR = Not Recorded

**Erler & Kalinowski, Inc.**

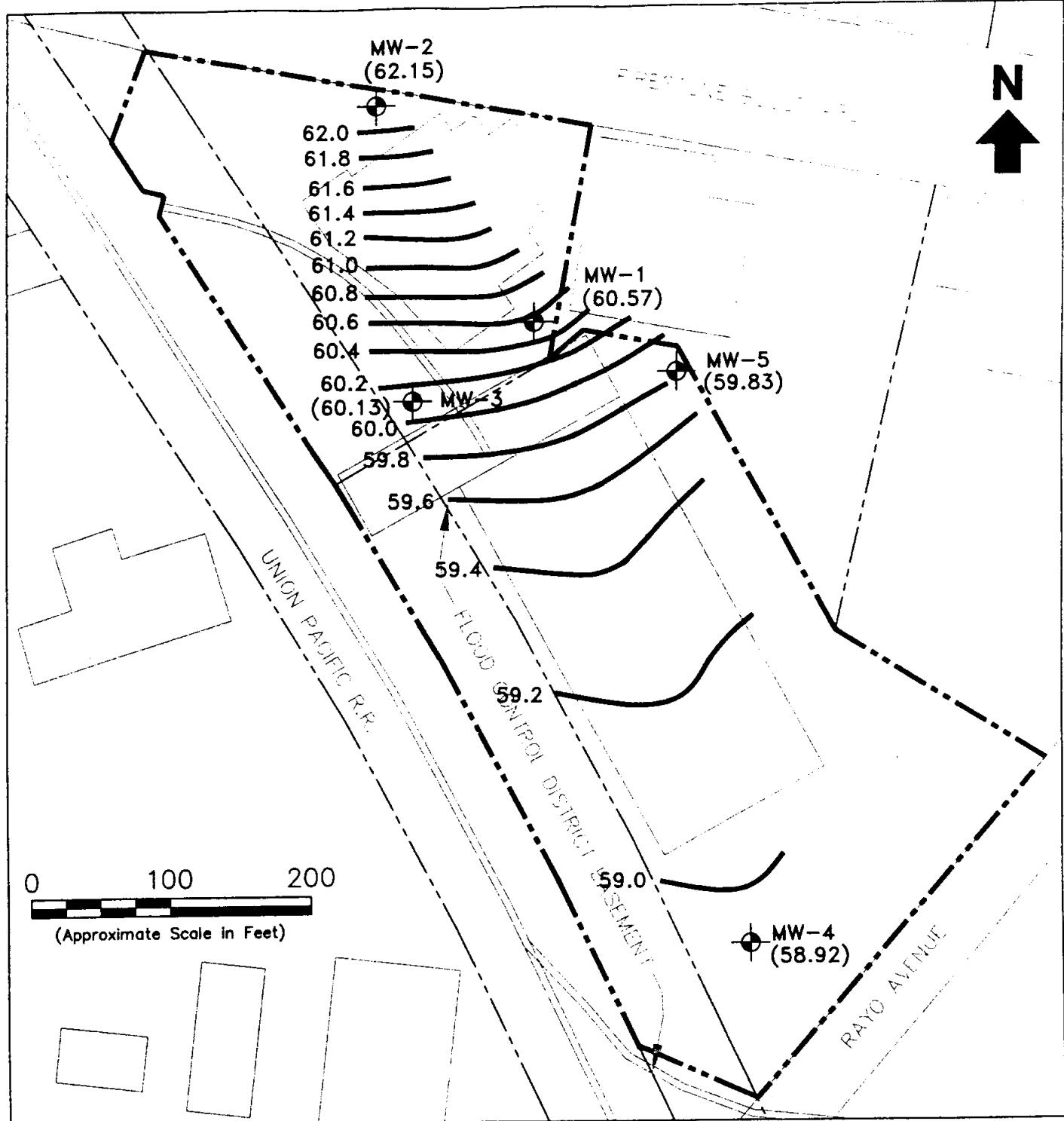
Elevation of the Groundwater Table on 24 April 2001

Jervis B. Webb Company of California  
South Gate, California

July 2001  
EKI 991103.01

Figure 3

001686



#### LEGEND

- 62.0 Contour Representing the Elevation of the Groundwater Table in Feet Above Mean Sea Level (msl)
- MW-3 (60.13) Groundwater Monitoring Well with Groundwater Elevation (msl)
- Property Line/Site Boundary

#### Notes:

- All locations are approximate.
- NR = Not Recorded

**Erler & Kalinowski, Inc.**

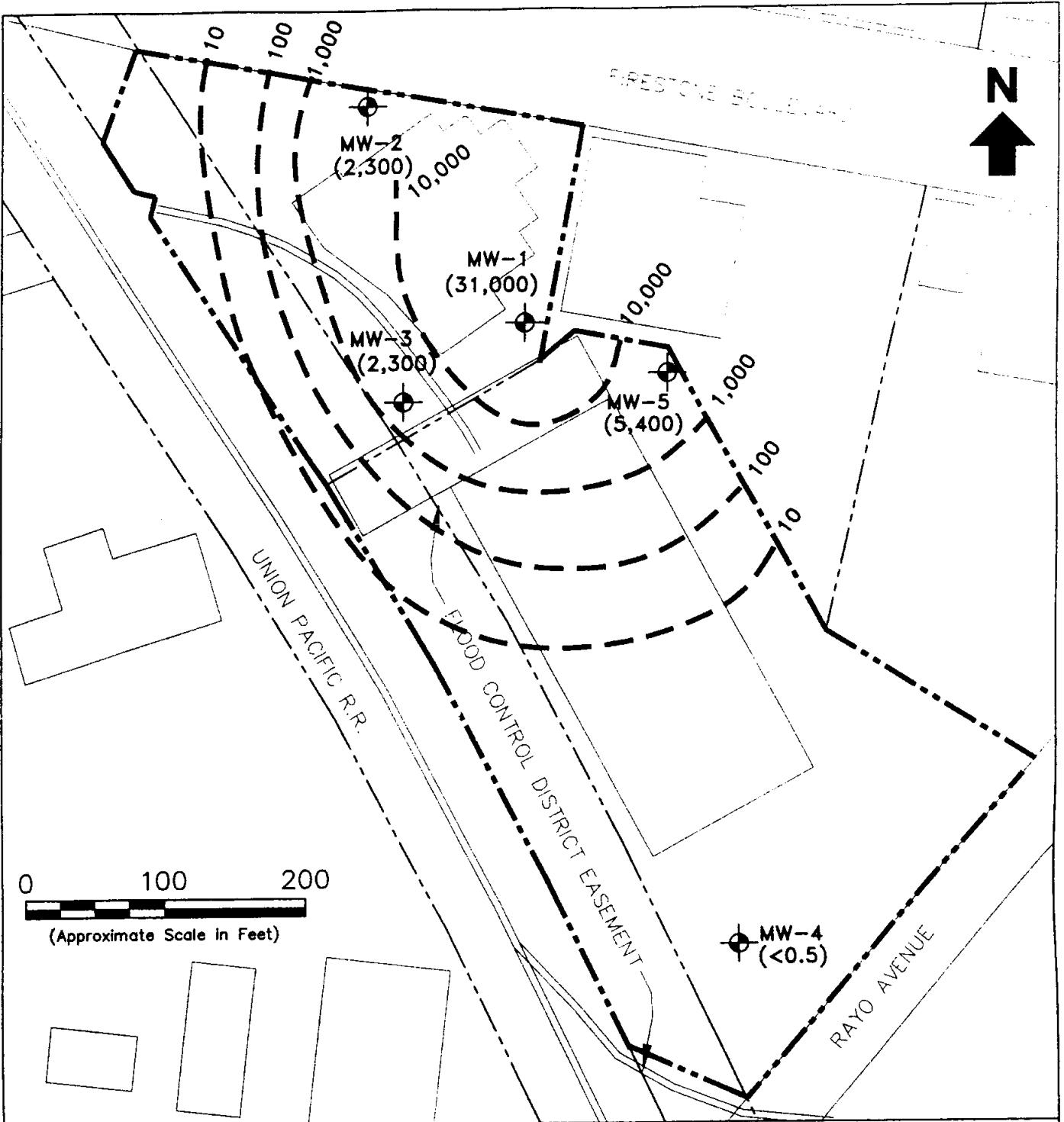
Elevation of the Groundwater Table on 5 June 2001

Jervis B. Webb Company of California  
South Gate, California

July 2001  
EKI 991103.01

Figure 4

001687



#### LEGEND

- - - 1,000 — Isoconcentration Contour for Trichloroethene (Micrograms per Liter)
- MW-3 Groundwater Monitoring Well
- Property Line/Site Boundary

#### Notes:

1. All locations are approximate.
2. Concentrations shown in units of micrograms per liter.

**Erler & Kalinowski, Inc.**

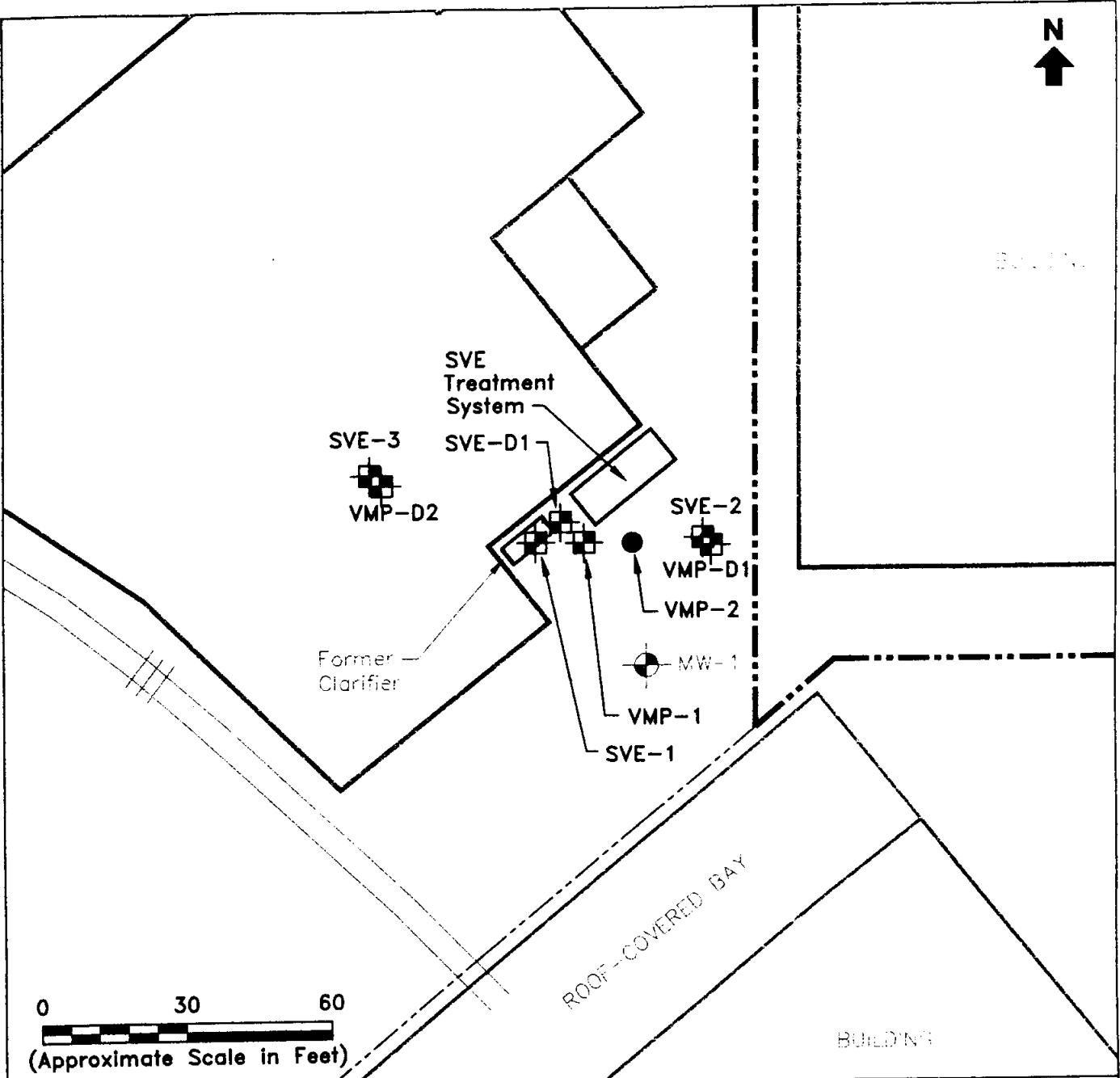
Concentrations of Trichloroethene  
Detected in Groundwater Samples

Jervis B. Webb Company of California  
South Gate, California

July 2001  
EKI 991103.01

Figure 5

001688



#### LEGEND

- Location of Soil Vapor Extraction Wells
- Location of Vapor Monitoring Probe
- Location of Groundwater Monitoring Well
- Property Line/Site Boundary
- Building
- |||| Railroad Spur

#### Notes:

1. All locations are approximate.
2. SVE = Soil Vapor Extraction

**Erler & Kallnowski, Inc.**

Layout of the Soil Vapor  
Extraction System

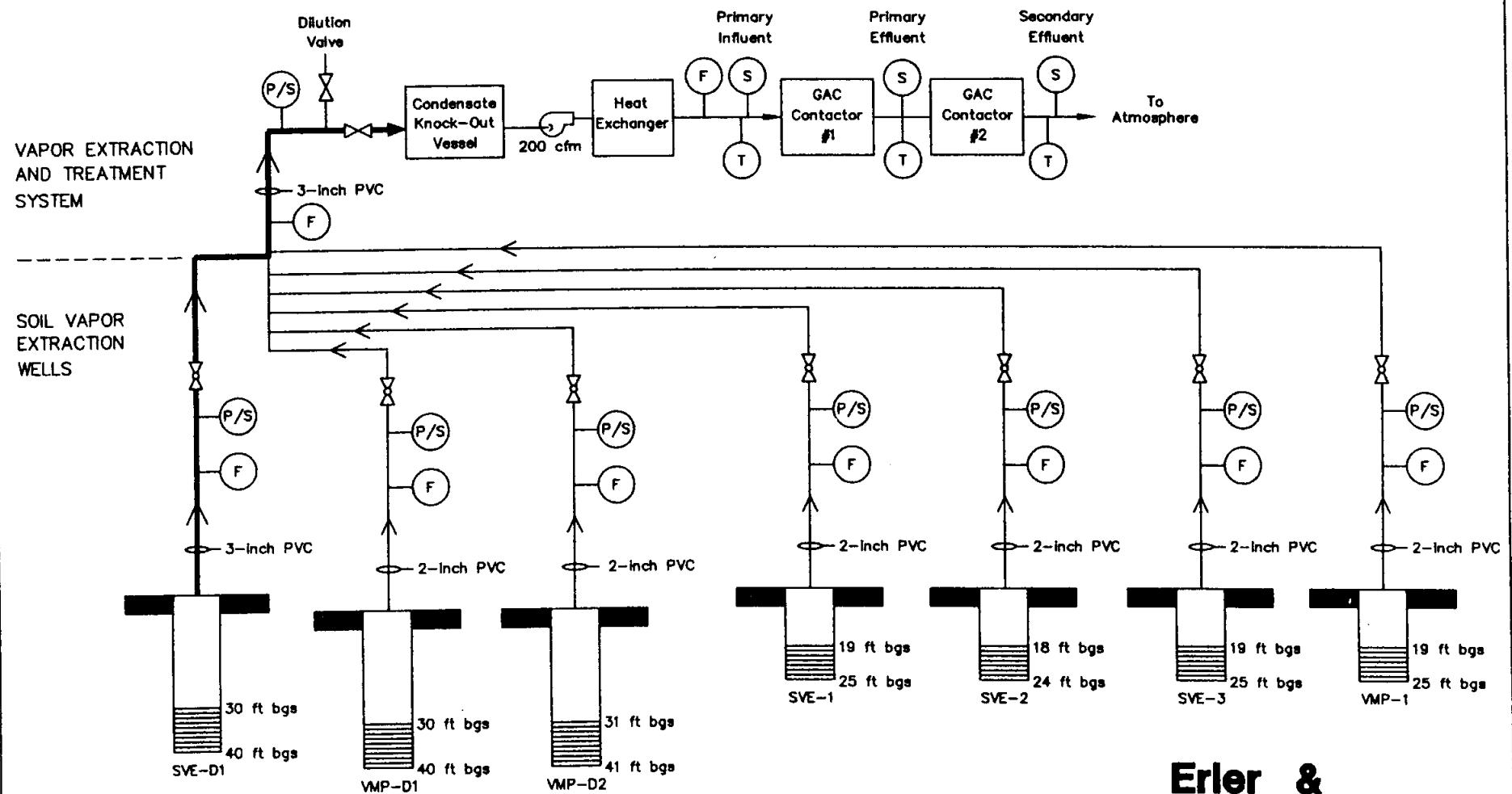
Jervis B. Webb Company of California  
South Gate, California

July 2001

EKI 991103.01

Figure 6

001689



#### LEGEND

- |       |                      |      |                |
|-------|----------------------|------|----------------|
| (F)   | Flow Port            | ☒    | Ball Valve     |
| (P/S) | Pressure/Sample Port | ▷    | Gate Valve     |
| (S)   | Sample Port          | ■■■■ | Well Screen    |
| (T)   | Temperature Gage     | <    | Flow Direction |
|       |                      | ♂    | SVE Blower     |

#### Notes:

1. Not to scale.
2. Pressure/Sampling Ports are 1/4" hose barbs.
3. Abbreviations:

cfm = cubic feet per minute  
 ft bgs = feet below ground surface  
 GAC = granular activated carbon  
 SVE = soil vapor extraction

**Erler & Kallnowski, Inc.**

Soil Vapor Extraction  
System Schematic

Jervis B. Webb Company of California  
South Gate, California

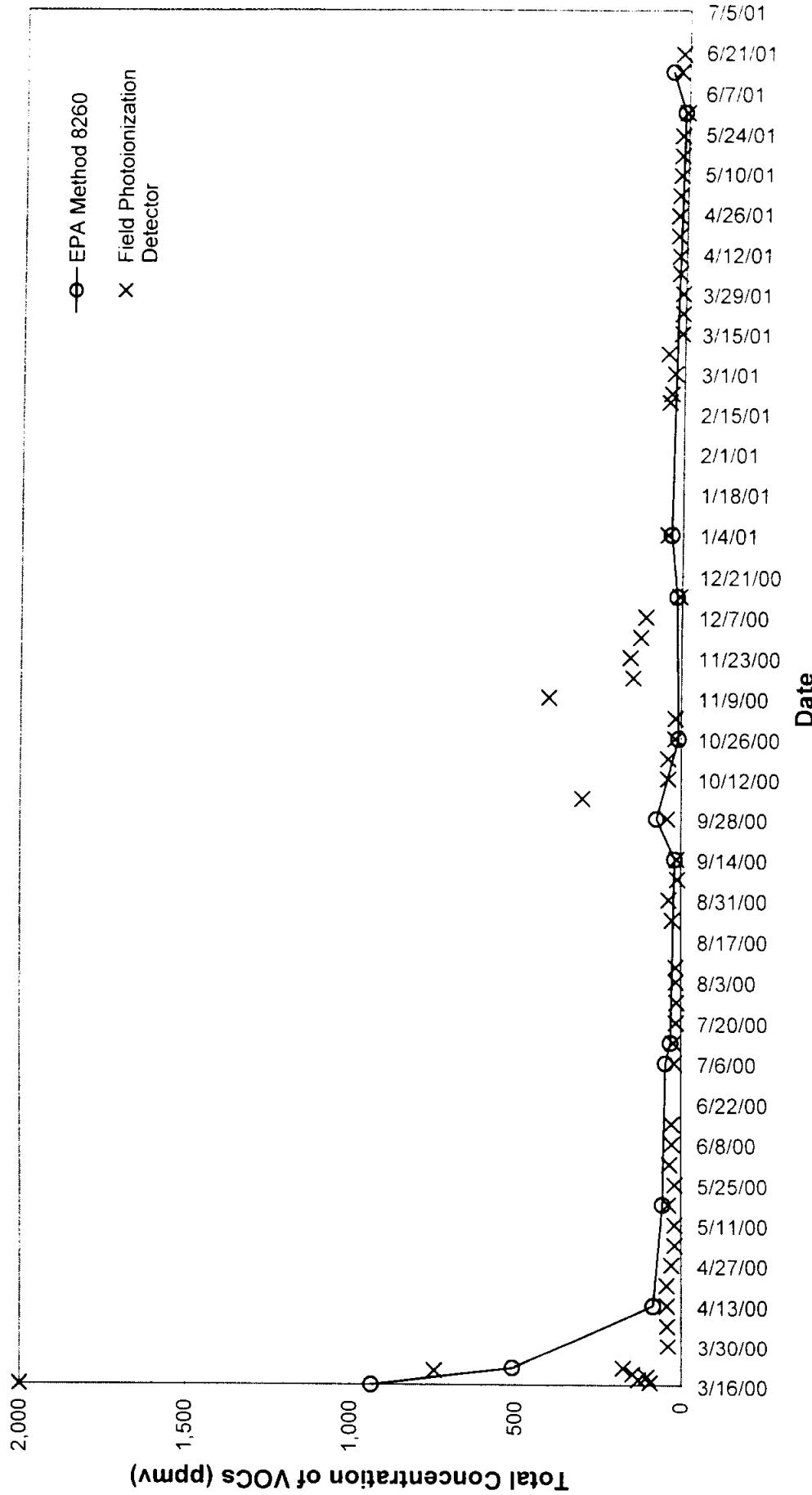
July 2001  
EKI 991103.01

Figure 7

## **FIGURE 8a** **Concentrations of Total VOCs versus Time:** **Blower Influent**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

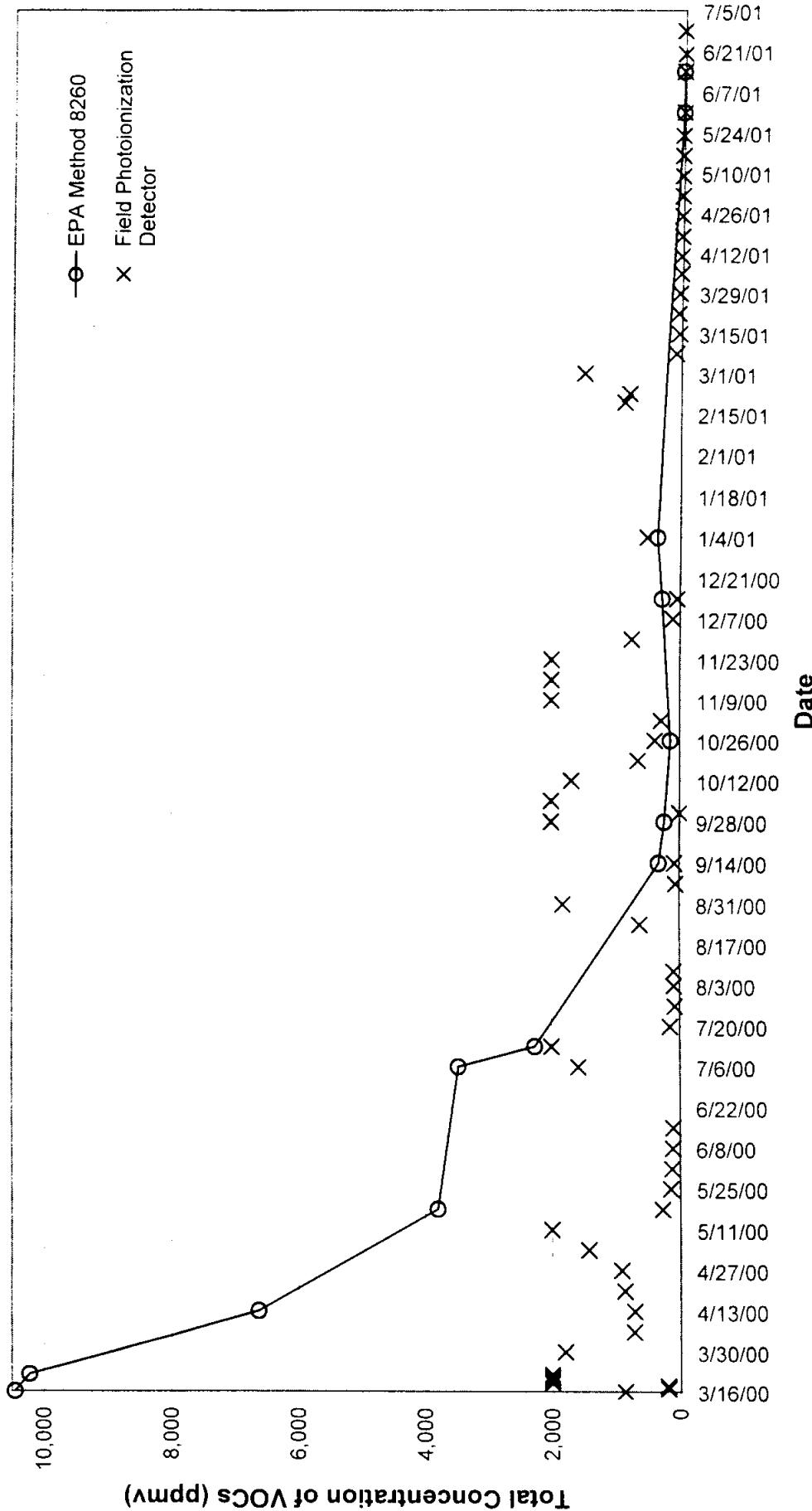


## **FIGURE 8b**

### **Total Concentrations of VOCs versus Time: Extraction Well SVE-1**

Quarterly Progress Report for April through June 2001

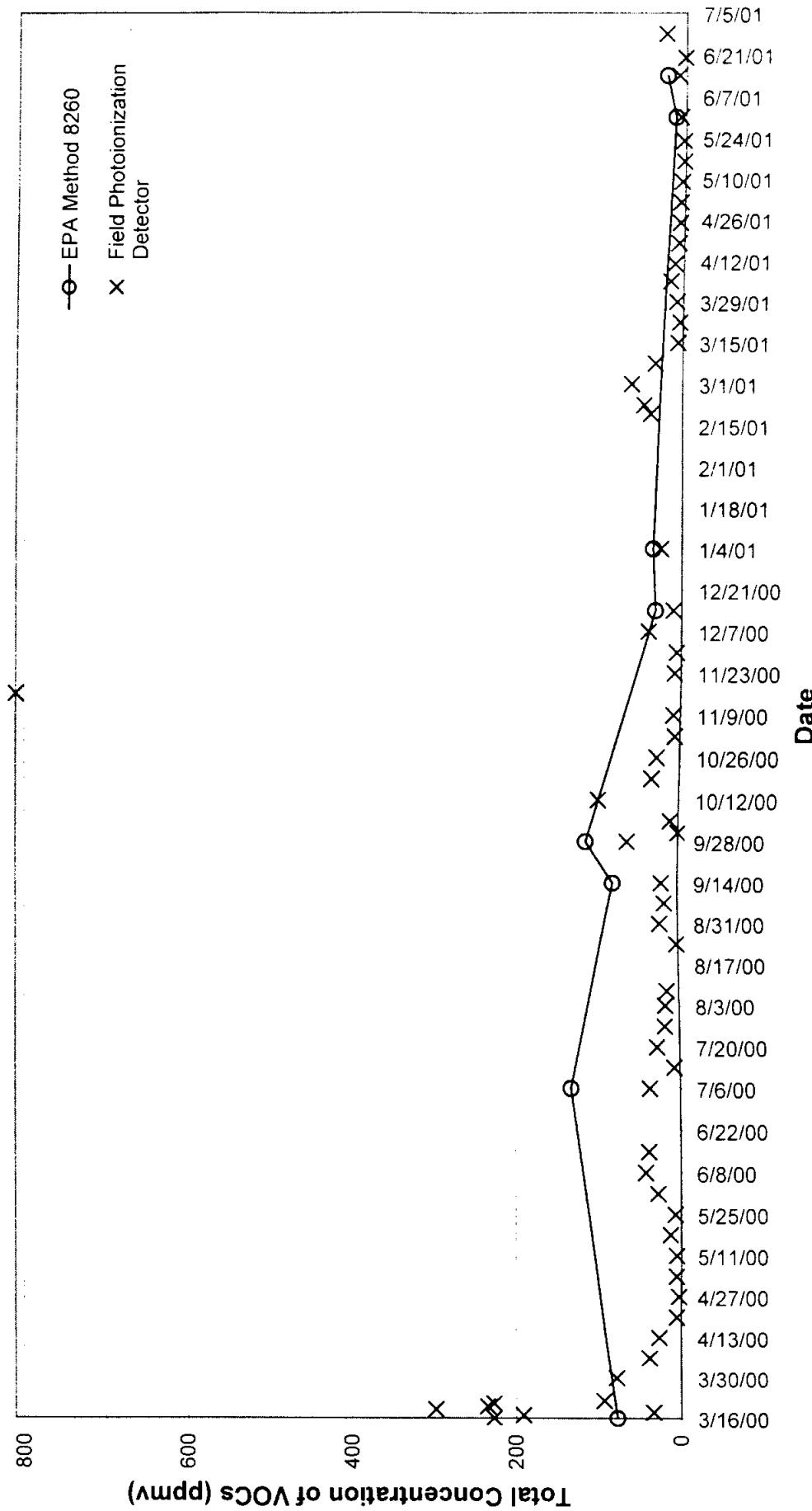
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8c**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well SVE-2**

Quarterly Progress Report for April through June 2001

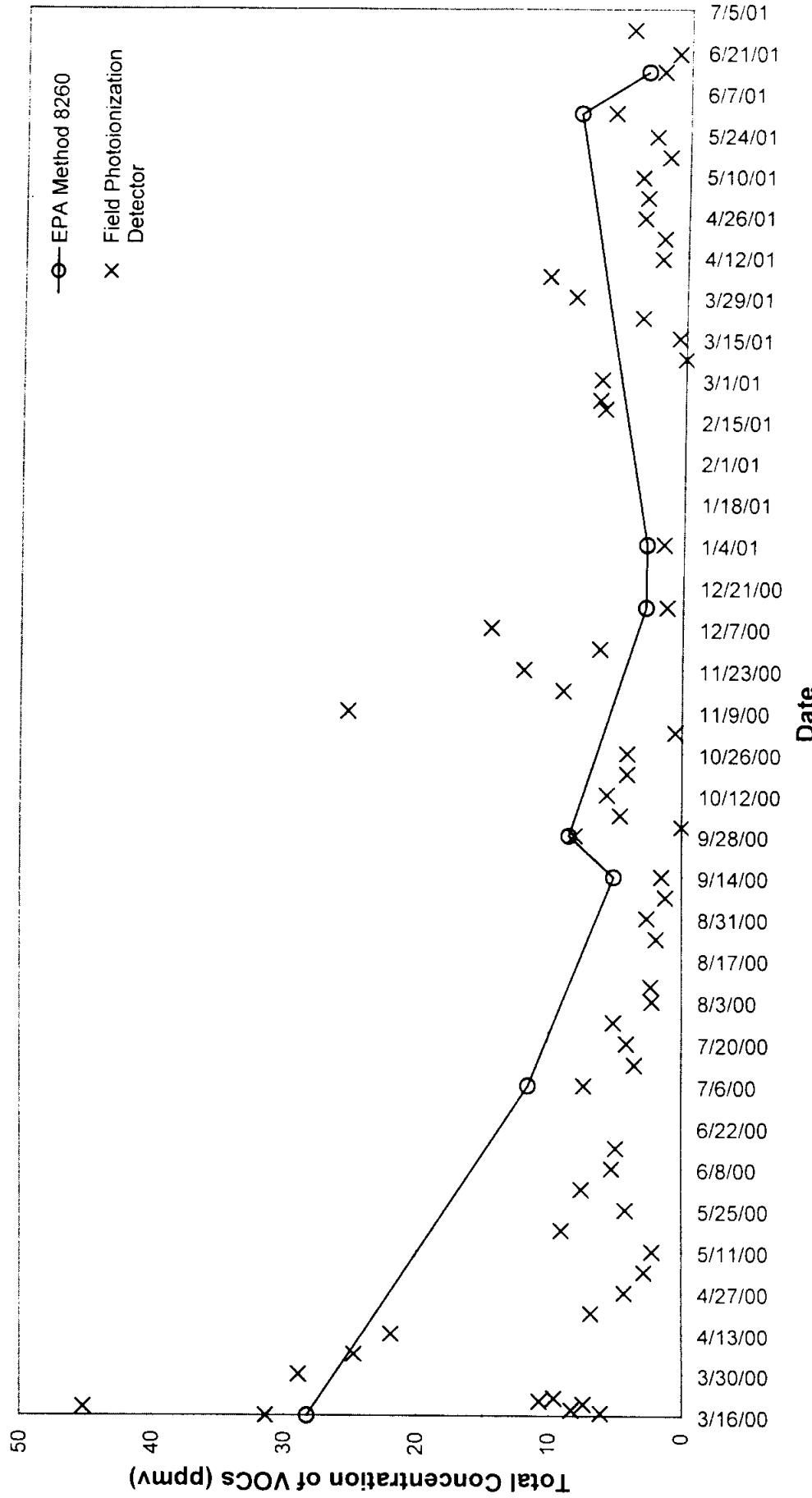
Jenvis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8d**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well SVE-3**

Quarterly Progress Report for April through June 2001

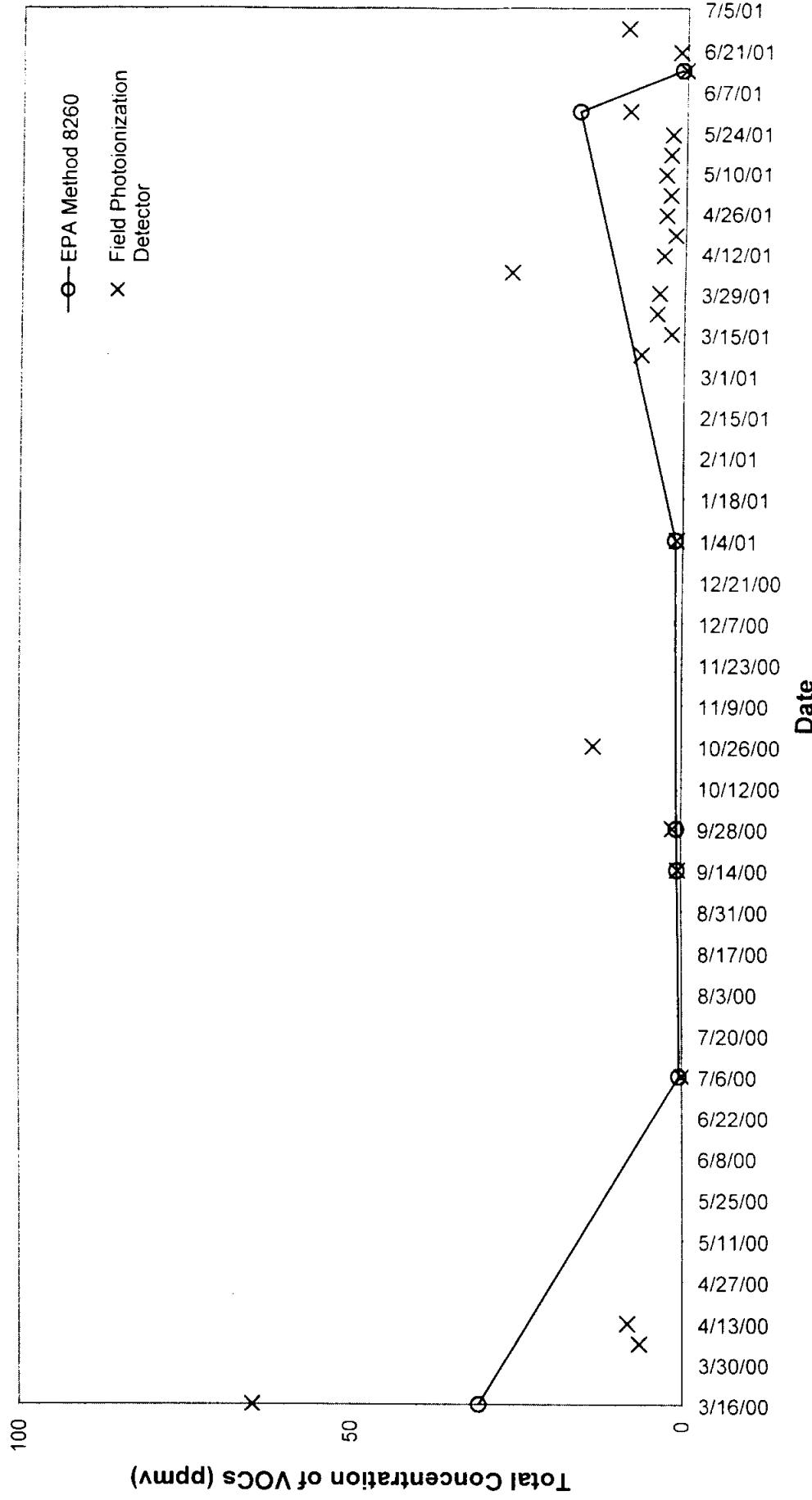
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8e**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well VMP-1**

Quarterly Progress Report for April through June 2001

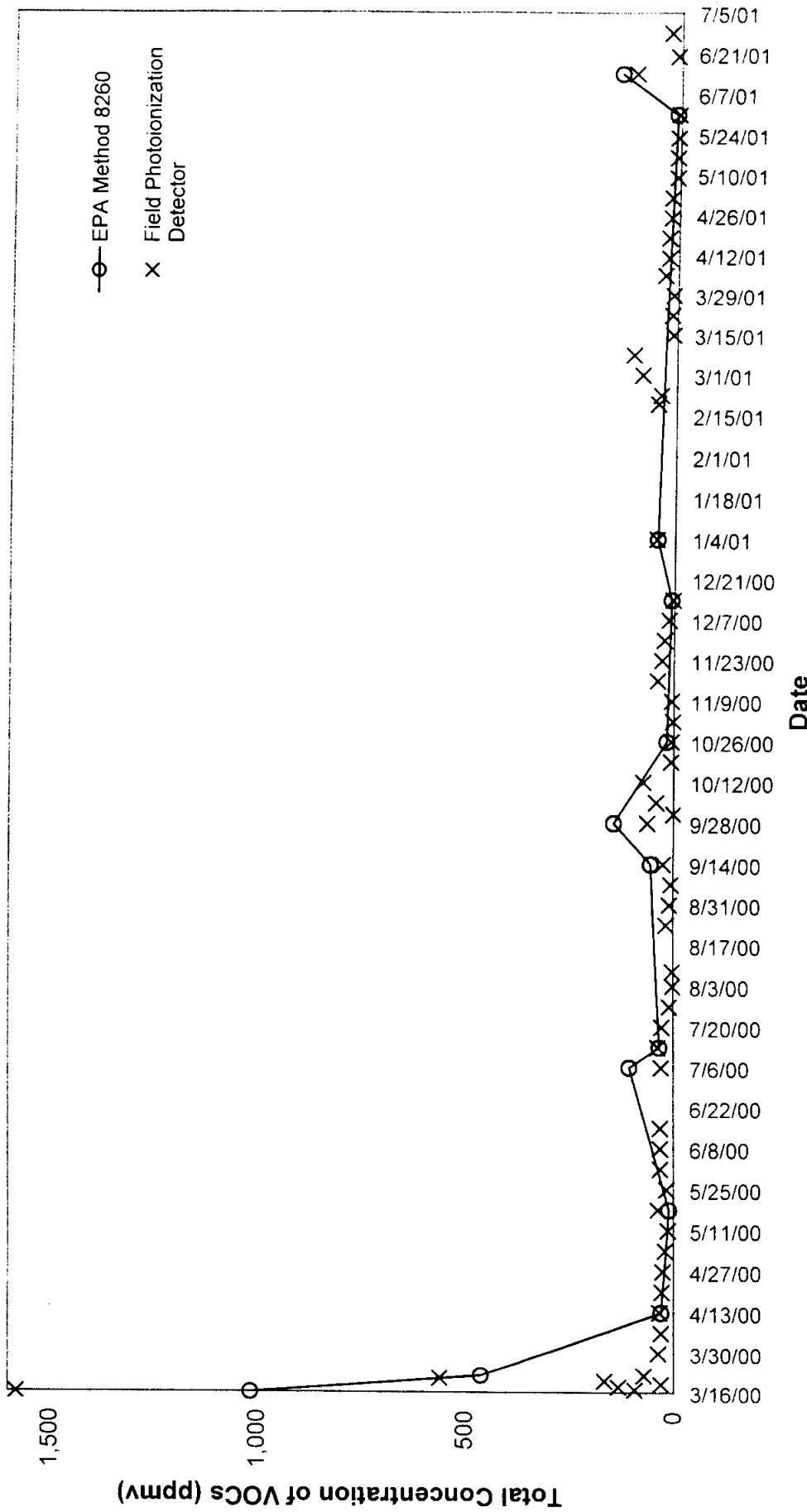
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8f**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well SVE-D1**

Quarterly Progress Report for April through June 2001

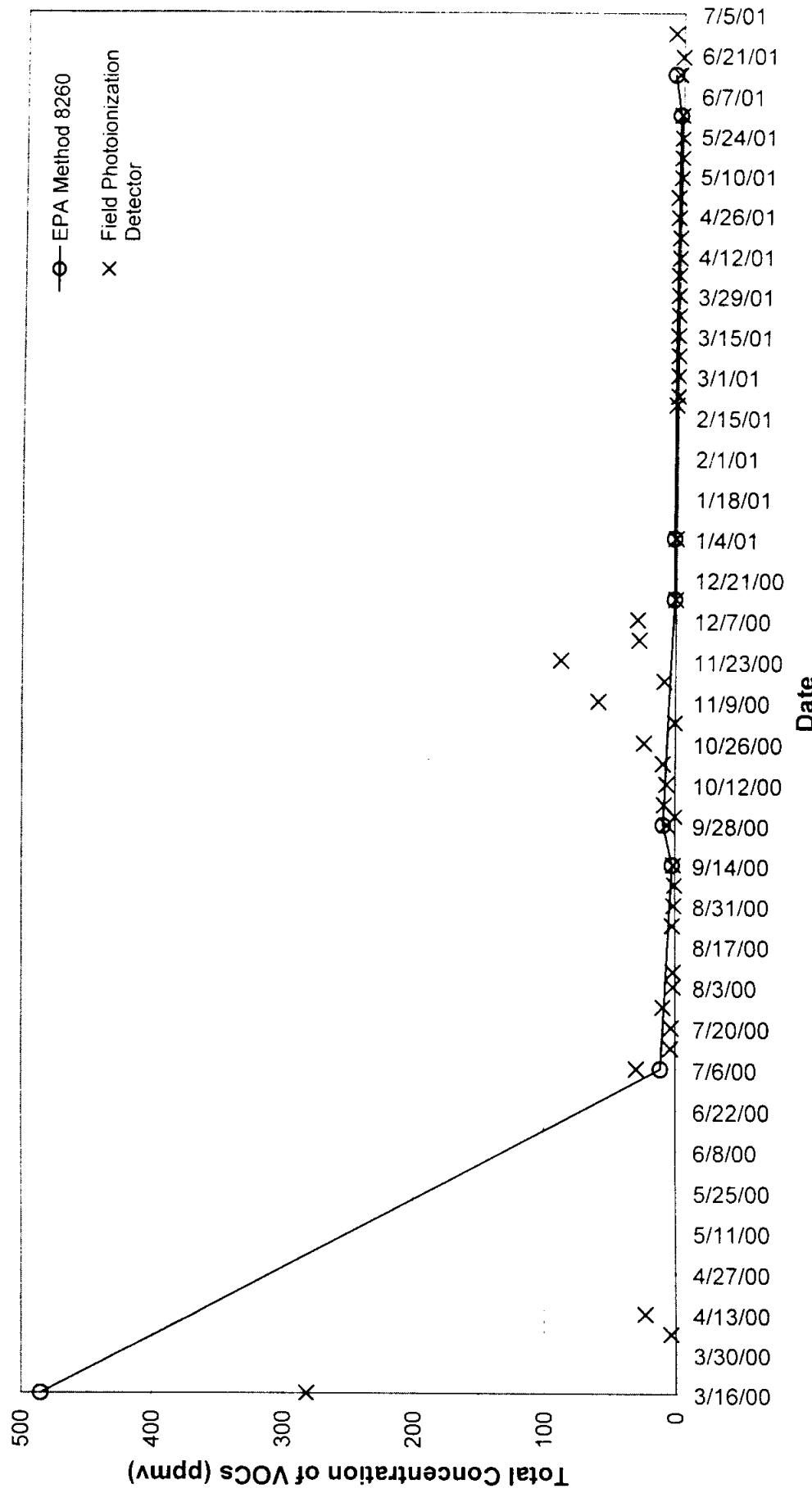
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8g**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well VMP-D1**

Quarterly Progress Report for April through June 2001

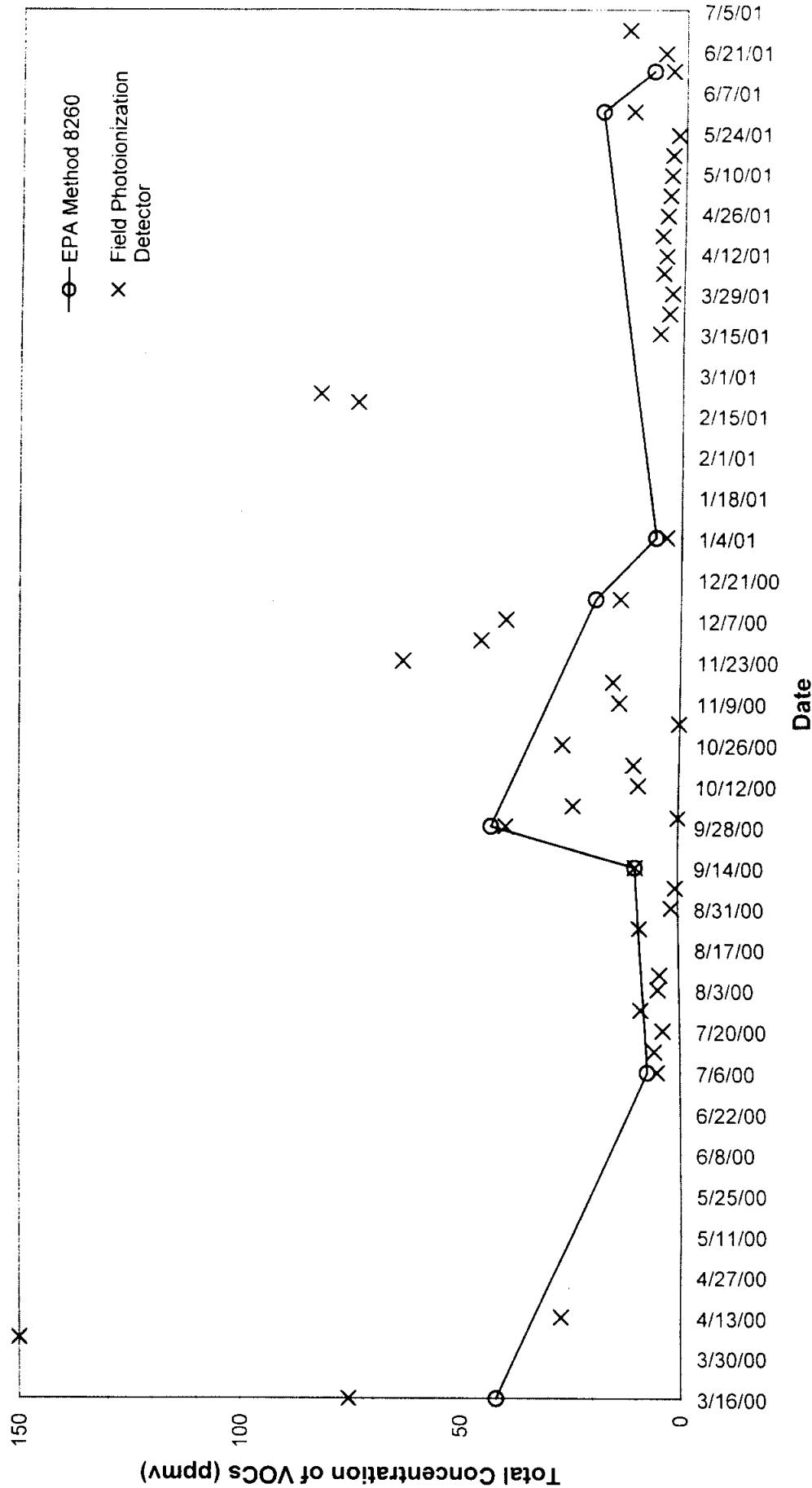
Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



**FIGURE 8h**  
**Concentrations of Total VOCs versus Time:**  
**Extraction Well VMP-D2**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California

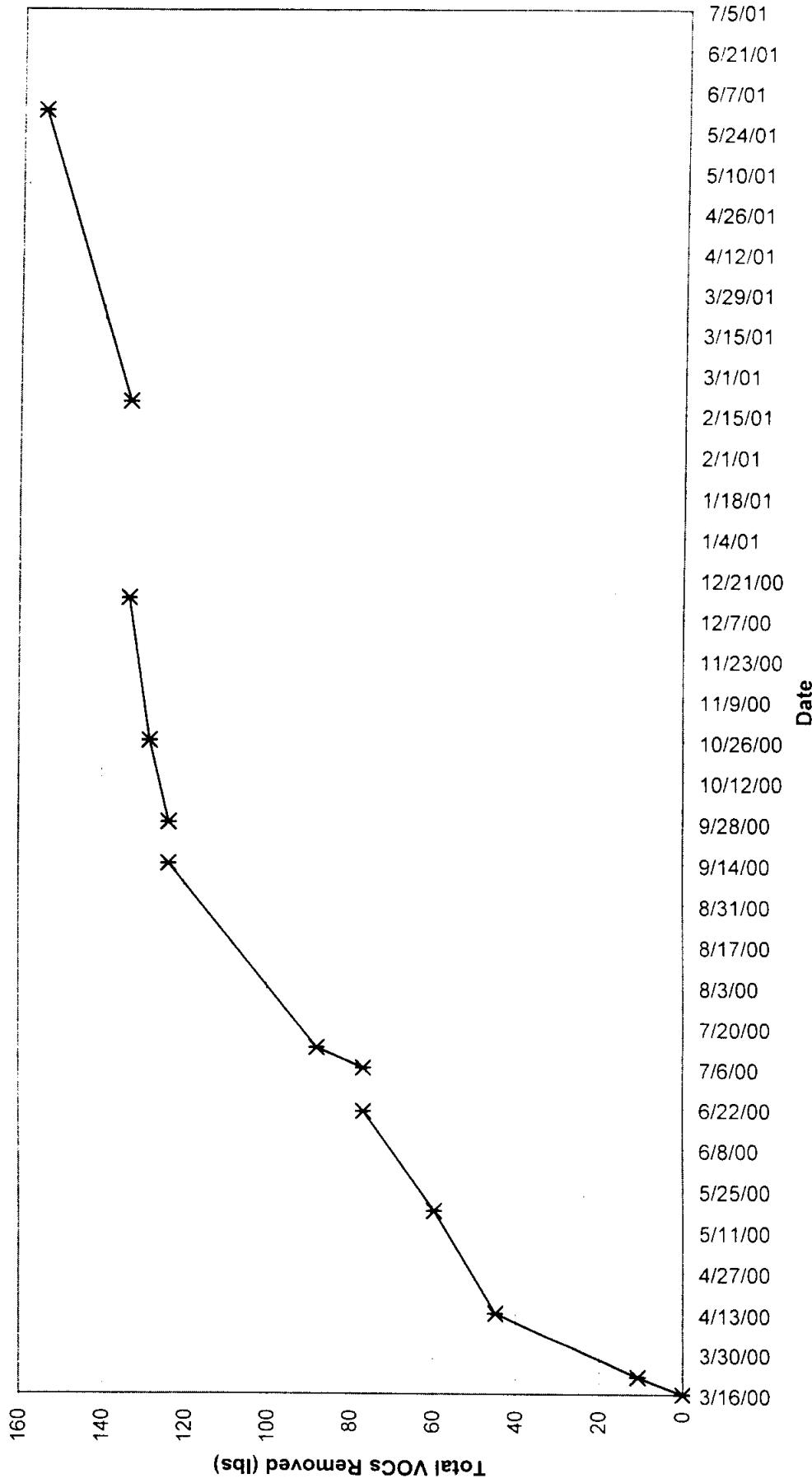


## **FIGURE 9**

### **Cumulative VOC Removal**

Quarterly Progress Report for April through June 2001

Jervis B. Webb Company of California, 5030 Firestone Boulevard, South Gate, California



BOSTON  
CHICAGO  
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October 4, 2001

Arthur C. Heath, Ph.D.

Rebecca Chow

Steve Hariri

California Regional Water Quality Control Board  
320 W. Fourth Street, Suite 200  
Los Angeles, CA 90013

Re: Jervis B. Webb Company of California  
City of South Gate  
RWQCB LIC File No. 744 (the "Site")

Dear Art, Rebecca & Steve:

Jervis B. Webb Company of California (Webb of California) is pleased to submit the attached Soil Closure Report for the Site. The report presents the results of the five recent confirmation borings in the context of the extensive investigation and remedial efforts conducted at the Site over several years. Based on the extensive investigation of the Site, the removal of contaminant source areas, the SVE system's effective remediation of VOCs, the very low level of remaining residual VOCs, the background levels of naturally occurring arsenic, the lithology and zoning of the Site, we are requesting soil closure of the Site at this time.

Webb of California has expended more than \$900,000 in environmental costs at the Site. Webb of California is actively marketing its remaining portion of the property at a listing price significantly less than what it has expended to date. This vacant, non-income-generating property is Webb of California's sole asset.

In light of our efforts to sell the property by year end, we would appreciate your prompt review and consideration of our closure request. We are available to discuss any questions or issues which you may have.

Again, thank you for your attention.

Yours very truly,

*Gene A. Lucero*

Gene A. Lucero  
of LATHAM & WATKINS

Enclosure